



County of Fairfax, Virginia

MEMORANDUM

DATE: June 10, 2010

TO: David Marshall, Chief
Facilities Planning Branch, Planning Division, DPZ

FROM: Kevin Guinaw, Chief *K. Guinaw*
Special Projects/Applications Management Branch, Zoning Evaluation Division, DPZ

SUBJECT: Proposed Clearwire Telecommunications Facility at 2709 Popkins Lane;
Tax Map 93-3 ((1)) 3; 2232 Application FS-V10-27

This is in response to a request for a determination as to whether a telecommunications facility proposed by Clearwire at 2709 Popkins Lane is in substantial conformance with the development conditions approved by the Board of Supervisors in conjunction with Special Exception Amendment SEA 86-V-072-4 (for alternate use of a public facility for child care center and nursery school). As described in the 2232 application dated May 5, 2010, from Michael Hamilton, agent for the applicant, three (3) panel antennas (42 inches high x 11.8 inches wide x 4.5 inches deep) are proposed at a height of 99 feet and three (3) dish antennas (26.1 inches in diameter) are proposed at a height of 103 feet on the existing 113-foot tall monopole/light pole. In addition, two (2) equipment cabinets (55 inches high x 25.5 inches wide x 25.5 inches deep) are proposed in the existing equipment compound behind a proposed board-on-board fence at the base of the monopole/light pole. A copy of the 2232 telecommunications application with illustrations depicting the proposed locations of the telecommunications equipment is attached.

The Zoning Administration Division has determined that a telecommunications facility as described above is a permitted use pursuant to the provisions of Sect. 2-514 of the Zoning Ordinance provided that it is determined to be in substantial conformance with any applicable special exception. It is my determination that the proposed telecommunications facility is in substantial conformance with the above-referenced application. Please note that this proposal is subject to 2232 review requirements and that the applicant's ability to proceed is dependent upon approval of the pending 2232 application by the Fairfax County Planning Commission. This determination has been made in my capacity as the duly authorized agent of the Zoning Administrator. If you have any questions regarding this memorandum, please call Carrie Lee at (703) 324-1290.

KG/CDL/O:\clee01\ActionAssignments\Antennas\2709 Popkins Ln_monopole lightpole\2709 Popkins Ln_Clearwire.doc

Attachments: A/S

cc: Gerald W. Hyland, Supervisor, Mount Vernon District
Earl Flanagan, Planning Commissioner, Mount Vernon District
Regina C. Coyle, Director, Zoning Evaluation Division, DPZ
Diane Johnson-Quinn, Deputy Zoning Administrator, Zoning Permit Review, ZAD, DPZ
Michael Hamilton, Site Link Wireless, 7130 Minstrel Way, Suite 215, Columbia, MD 21045
File: SEA 86-V-072-4, ANT 1005 049, Imaging, Reading File

Department of Planning and Zoning
12055 Government Center Parkway, Suite 801
Fairfax, Virginia 22035-5509
Phone 703 324-1290
FAX 703 324-3924
www.fairfaxcounty.gov/dpz/

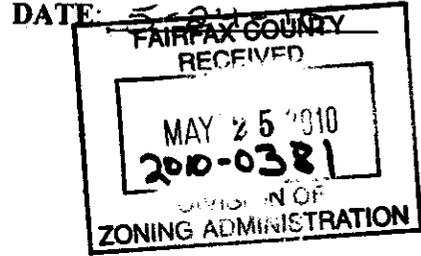




County of Fairfax, Virginia

MEMORANDUM

TO: Lorrie Kirst, Deputy Zoning Administrator, ZAD
Other: _____



FROM: David B. Marshall, Chief
Facilities Planning Branch, DPZ

SUBJECT: Request for Review: 2232 Application

RE: Application Number: FS-V10-27 Tax Map: 93-3 (1) 3

Attached for your review and comment is a 2232 Review application:

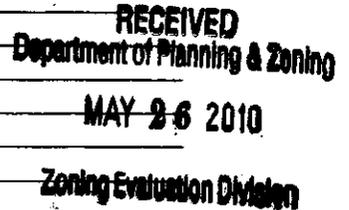
RECEIVED FROM: Clearwire
PROPOSED USE: Monopole/light pole collocation
LOCATION OF USE: 2709 Popkins Lane
ADDITIONAL COMMENTS: _____

Please send your comments to David Marshall by: 6/7/10
Staff Coordinator: Sandi Smith Phone: 703-324-1239 Email: sandi.smith@fairfaxcounty.gov

****ZAD COMMENTS:**

Property is zoned R-2
____ Proposed use is permitted by Zoning Ordinance and meets all zoning requirements.
____ Proposed use does not meet all Zoning requirements as follows:

See attached comments



Referred to ZED for the following: Must be in substantial conformance with SEA 86-V-072-4
ZAD comments prepared by: Brian Parsons Date: 5/25/10

****ZED COMMENTS:**

____ Proposed use is in substantial conformance with all development conditions and/or proffers.
____ Proposed use is not in substantial accord with all development conditions and proffers.

**ZED comments prepared by: _____ Date: _____



Kirst, Lorrie

From: Kirst, Lorrie
Sent: Tuesday, May 25, 2010 3:50 PM
To: Smith, Sandi M.
Cc: Parsons, Brian S.
Subject: FW: FS-V10-27, Clearwire, 2709 Popkins Lane

Clearwire- Antenna collocation on light pole

2709 Popkins Lane (Bryant Alternative School)

Tax Map Ref.: 93-3 ((1)) 3

Zoning District: R-2

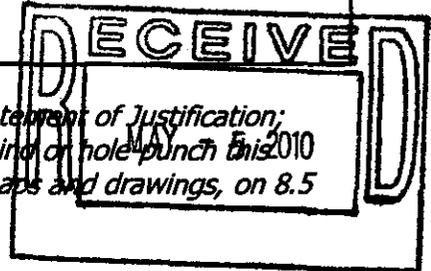
The proposed use meets the requirements of Par. 2 of Sect. 2-514 of the Zoning Ordinance

Refer to ZED: Must be in substantial conformance with SEA 86-V-072-4.

Prepared by: Brian Parsons 5/25/10

COUNTY OF FAIRFAX, VIRGINIA
APPLICATION FOR DETERMINATION
PURSUANT TO
SECTION 15.2-2232 OF THE CODE OF VIRGINIA

Application Number: FS-V10-27
(assigned by staff)



The application contains three parts: I. Application Summary; II. Statement of Justification; and III. Telecommunication Proposal Details. Please do not staple, bind or hole punch this application. Please provide at least one copy of all pages, including maps and drawings, on 8.5 x 11 inch paper.

(Please Type or Print All Requested Information)

PART I: APPLICATION SUMMARY

ADDRESS OF PROPOSED USE

Street Address 2709 Popkins Lane
City/Town Alexandria Zip Code 22306

APPLICANT(S)

Name of Applicant Clearwire
Street Address 593 Herndon Pkwy
City/Town Herndon State VA Zip Code 22170
Telephone Number: Work (____) _____ Fax (____) _____
E-mail Address mhamilton@sitelinkwireless.com
Name of Applicant's Agent/Contact (if applicable) Michael Hamilton
Agent's Street Address 7130 Minstrel Way, Suite 215
City/Town Columbia State MD Zip Code 21045
Telephone: Work (443) 845-8923 Fax (____) 410-309-4995

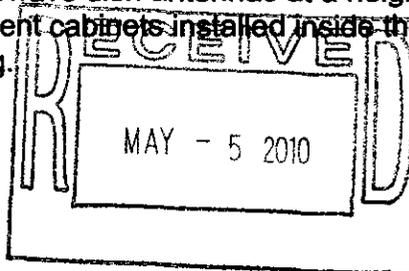
PROPOSED USE

Street Address 2709 Popkins Lane

Fairfax Co. Tax Map and Parcel Number(s) 0933 01 0003

Brief Description of Proposed Use _____

The applicant proposes to modify an existing telecommunications facility. The proposed modification includes the installation of three (3) panel antennas mounted at a height of 99' and and three (3) microwave dish antennas at a height of 103' on a 110' tower. There will be two equipment cabinets installed inside the existing compound behind board on board fencing.



Total Area of Subject Parcel(s) 32.7753 acres (acres or square feet)

Portion of Site Occupied by Proposed Use N/A (acres or square feet)

Fairfax County Supervisor District Mt. Vernon

Planned Use of Subject Property (according to Fairfax County Comprehensive Plan)

Zoning of Subject Property R-2

List all applicable Proffer Conditions, Development Plans, Special Exceptions, Special Permits or Variances previously approved and related to this site

PROPERTY OWNER(S) OF RECORD

Owner School Board of Fairfax County

Street Address 8115 Gatehouse Drive

City/Town Falls Church State VA Zip Code 22042

PART II, entitled "Statement of Justification," pages 4 through 6, shall be completed by all applicants and included as part of the application. **PART III**, entitled "Telecommunication Proposal Details," pages 7 through 9, also shall be completed and included for all proposed telecommunication uses.

Name of Applicant or Agent Michael Hamilton

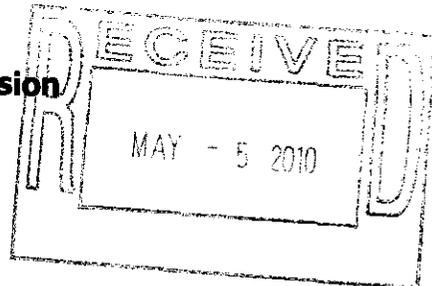
Signature of Applicant or Agent *Michael Hamilton*

Date 5/4/10

Please do not staple, bind or hole-punch this application. Please provide at least one copy of all pages, including maps and drawings, on 8.5 x 11 inch paper.

Submit completed application to:

**Fairfax County
Department of Planning and Zoning, Planning Division
Herrity Building
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035**



FOR STAFF USE ONLY

Date application received: 5/5/10

By: *CM*

Additional information requested to complete application:

Date application accepted: / /

By: _____

Fairfax County
Department of Planning and Zoning
12055 Government Center Parkway, Suite 730
Fairfax, VA 22035

Attn: James Zook

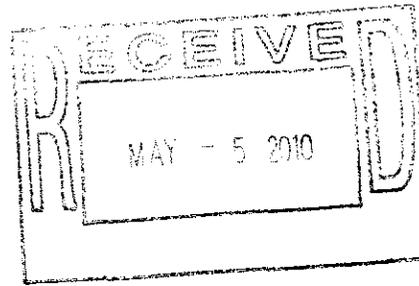
RE: **Statement of Justification** for determination of conformance with Fairfax County Comprehensive Plan pursuant to Section 15.2-2232 of the Code of Virginia for a telecommunications facility proposed: **To install three (3) panel antennas, and install three (3) dish antennas and to a situate related equipment cabinets near the base of an existing one hundred ten (110) foot tall light pole/monopole on public property located at 2709 Popkins Lane, Alexandria, VA 22306**

APPLICANT:

Clearwire US, LLC
593 Herndon Parkway
Herndon, VA 20170

SITE LOCATION:

Clearwire Site # VA-WS1008
2709 Popkins Lane, Alexandria, VA
Tax ID #: 0933-01-0003
Zoning District: R-2



Dear Mr. Zook:

Pursuant to Section 15.2-2232 of the Code of Virginia, Clearwire US, LLC, (“Clearwire”) hereby requests a determination that the proposed wireless telecommunication collocation application described herein is in substantial accord with the Fairfax County Comprehensive Plan.

Description of Proposed Use:

The proposed facility will function as a base transmission station for Clearwire’s wireless telecommunication network. Clearwire proposes to install three (3) panel antennas, each forty two (42) inches tall by eleven point eight (11.8) inches in diameter by four point five (4.5) inches deep, on an existing one hundred ten (110) foot tall light pole monopole (hereinafter referred to as the “Pole”) on the above referenced property. The panel antennas will be flush mounted to the Pole at an elevation of ninety nine (99) feet. Clearwire also wishes to install three (3) twenty six point one (26.1) inch diameter dish antennas, on the Pole at a RAD center elevation of one hundred three (103) feet. None of Clearwire’s antennas will extend above the height of the existing pole and all will be flush mounted to the Pole. Two (2) equipment cabinet, fifty four point two five (54.25) inches tall by twenty five point five (25.5) inches wide by twenty five point two five (25.25) inches deep, are proposed to be located upon a proposed three (3) foot by six (6) foot platform located within an existing equipment compound enclosed by board on board fencing.

Attached are photo simulations that show the proposed facility.

The subject property is currently used as a public school and is improved with school building, paved parking areas and recreation sports fields. The existing Pole serves to illuminate one of these ball fields. There are currently two (2) other wireless carriers utilizing this facility.

The proposal is for an unmanned facility which will be operational 24 hours per day, 7 days per week throughout the year. Once completed, the site will normally be visited during regular business hours by a technician on a schedule yet to be determined.

This site is necessary to provide wireless internet coverage to the surrounding area. The proposed site will provide enhanced high speed 4G internet coverage and obviate the need for an additional site nearby. PC cards are hardware devices similar in size to a candy bar and are used to provide laptop computer user's access to the Internet on a mobile basis. Current pc cards utilizing cellular networks to deliver data do not operate at true broadband speeds. Clearwire offers the only pc card that delivers full broadband access to the Internet anywhere within Clearwire's coverage area. With more spectrum devoted solely to data services in the markets in which they operate than any other carrier in the country, Clearwire is able to provide a unique user experience.

Requirements for Proposed Use:

This site was selected because the existing Pole provides sufficient space for antennas which will provide coverage to users within the area. The proposed site was selected because it is improved with an existing tower and it will be the least disruptive to the community, in accordance with the Fairfax County Comprehensive Plan.

Anticipated Impacts on Adjoining Properties:

As this is an unmanned facility, the site will not generate excessive traffic; will not cause any noise, air, light or water pollution. No noise, lights, dust or vibrations will be generated. There will be no environmental concerns as the radio frequency emissions will be within applicable Federal Communications Commission (FCC) guidelines. No lighting is proposed.

The visual impact to adjoining properties will not be significantly altered by the addition of antennas on the tower currently on the subject property.

RELATIONSHIP OF THE PROPOSAL TO THE COMPREHENSIVE PLAN

The proposed facility is consistent with and furthers the transcendent goals of the Fairfax County Comprehensive Land Use Plan ("Plan") as well as the applicable objectives.

The location, character and extent of the application should be found to be in substantial accord with the Comprehensive Plan. In terms of location, the use of existing structures is encouraged by the plan for new site development.

Regarding the character of the proposal, the location of telecommunication antennas on an existing tower is an attempt to optimize the use on an existing structure already present on the subject parcel. The extent of the proposed facility should be found to be in substantial accord with the plan as well. The proposed facility poses no encroachment on any existing easements or services.

The instant application is also consistent with the objectives found under the Policy Plan of the Comprehensive Plan concerning "Mobile and Land-Based Telecommunication Services."

Under the "Public Facilities" section and the "Utilities and Services" subsection, it states:

Objective 42: *In order to provide for mobile and land based telecommunication network for wireless telecommunications systems licensed by the Federal Communication Commission, and in order to achieve opportunities for the co-location of related facilities and the reduction of their visual impact, locate the network's necessary support facilities which include antennas, monopoles, lattice towers and equipment buildings in accordance with the following policies.*

Policy A: *Avoid construction of new structures by locating mobile and land-based telecommunication facilities on available existing structures such as building rooftops, telecommunication and broadcast poles and towers, electrical utility poles and towers, and water storage facilities when the telecommunications facilities can be placed inconspicuously to blend with existing structures.*

- Clearwire submits that making use of the existing Pole as a location for a new telecommunications facility effectively avoids the need to construct a new tower. The enclosed photo-simulations demonstrate the circumstances of this particular site.

* * *

Policy C: *Subject to the availability and feasibility of a public site, when multiple sites have equal opportunity to minimize impacts, consider public lands as the preferred location for new structures.*

- The subject property is a public property owned and operated by the Fairfax County Public School Board.

Policy D: *Locate mobile and land based telecommunications facilities on public property only after a lease agreement between the County, or related Board or authority, and service provider has been established.*

- Clearwire would not locate any antennas or equipment on the subject property without an agreement with the Fairfax County School Board or its agent.

Policy E: *Locate mobile and land based telecommunications facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property when a co-location structure for multiple service providers is not desirable or feasible due to site limitations or visual impact concerns.*

- The Pole is used by three (3) service providers.

Policy F: *Ensure that the height of towers and monopoles has the least visual impact and is no greater than required to achieve service area requirements and potential collocation, when visually appropriate.*

- Clearwire will not increase the height of the existing Pole.

Policy G: Ensure that the use of public property by the mobile and land based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use.

- Clearwire's use is passive, and will not impact the existing or planned operational requirements of the public school use.

Policy H: Design, site and/or landscape mobile and land-based telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height and materials of the proposed structures and their relationship to the other structures on the property and surrounding areas.

- Clearwire's proposal will not impact the character of the subject property and surrounding areas.

* * *

Policy K: Locate telecommunication facilities to ensure the protection of historically significant landscapes. The views and vistas for architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.

- Clearwire's proposal will not impact any architecturally or historically significant landscapes.

Policy L: Site proposed facilities to avoid areas of environmental sensitivity.

- The subject property is a school and not an area of environmental sensitivity.

Policy M: Site proposed facilities to allow for future expansion and maintain levels of screening to accommodate expansion.

- Clearwire's proposal will not impact existing screening.

Furthermore, Clearwire concludes that the proposed facility should be found to be a feature shown of the Comprehensive Plan by demonstrating compliance with the "Feature Shown Guidelines" of the Comprehensive Plan, which provides:

Objective 44: With Planning Commission approval, consider mobile and land-based telecommunication facilities to be located on existing or replacement structures a "feature shown" of the Comprehensive Plan to be processed without a public hearing when placed in conformance with the following policies:

Policy a. Locate telecommunication facilities on existing buildings and structures at the following properties:

- ***publicly owned property (as defined under Sect. 2-514 of the Zoning Ordinance);***

- Clearwire's proposal will utilize an existing Pole on Public property.

Policy b. Utilize the following types of existing poles and towers for telecommunication facilities to avoid the construction of new monopoles and towers:

**** * ****

- ***communication towers and monopoles;***

**** * ****

- ***replacement poles . . . and provided such poles: (a) are located on a parcel of land developed with a public or nonresidential use or are on a vacant parcel that is planned for public or nonresidential use . . .***
- Clearwire's proposal will utilize a light pole replacement used as a telecommunications facility.

Policy c.: In determining that the proposed telecommunication facilities are a feature shown of the Comprehensive Plan, ensure that the following general factors are met:

- ***the proposed installation has no material adverse impact on the visual quality or character of the general area in which it is to be placed including any surrounding residential properties;***
 - Clearwire submits that the proposed antenna arrays on this tower will have little to no material adverse impact on the visual quality or character of the general area.
- ***the proposed installation is located and designed to blend with the structure on which it is placed such as flush-mounting antennas or screening the antennas and equipment as appropriate to the site;***
 - Clearwire submits that the proposed antennas will be flush-mounted.
- ***related equipment cabinets or shelters located on the ground or on a rooftop should be appropriately screened or placed to obscure their visibility from surrounding properties;***
 - The equipment cabinets will be screened by the existing board on board fencing.

ALTERNATIVE SITES CONSIDERED FOR THIS PROPOSAL

As Clearwire is making use of an existing structure on commercial property in lieu of building a new telecommunication tower, and does not believe that it was necessary to eliminate other existing structures.

Based upon the foregoing recitation, the applicant, Clearwire, respectfully submits to the Planning Commission that the proposed facility is consistent with the Comprehensive Plan as to character, location and extent, and requests that the Planning Commission determine that the facility is a feature shown of the Comprehensive Plan.

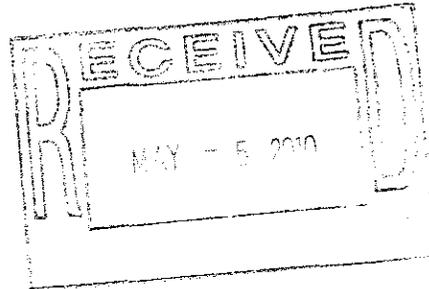
If you have any further questions or comments concerning this application, please feel free to contact me at 443-845-8923, or via email at: mhamilton@sitelinkwireless.com. I thank you in advance for your kind courtesies and attention with respect to this application.

Respectfully Submitted,



Michael Hamilton
Site Link Wireless
Obo Clearwire US, LLC

Enclosures



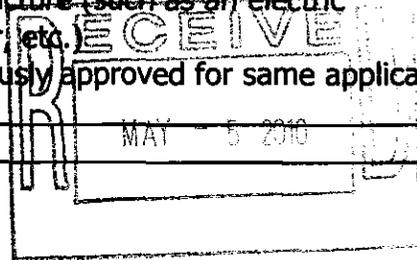
PART III: TELECOMMUNICATION PROPOSAL DETAILS

Please complete and provide all requested information. If question is not applicable to the proposed use, please indicate with N/A.

PROPOSED TELECOMMUNICATION USE

Use is (check one):

- New structure (monopole, tower or camouflaged facility)
- Replacement of existing pole or tower at same location with another pole or tower
- Antenna placement on building or penthouse facade
- Antenna placement on building or penthouse rooftop
- Collocation on other existing telecommunications structure (monopole or tower)
- Collocation on other non-telecommunications structure (such as an electric transmission tower/pole, utility pole, water tower, etc.)
- Modification to telecommunications facility previously approved for same applicant:
Prior 2232 Review application number: _____
Date of Planning Commission approval: _____



PROJECT DETAILS

1. ANTENNA

Number and Type: (3) KMW HB-XM-17-65-00T (3) VHLP2-18
Dimensions: height 42" width 11.8" depth 4.5" diameter 26.1"
Location / Placement: Monopole
Wattage: 100 watts
Material and Color: polymer painted to match
Material and Color of the Antenna Mounting: structural steel painted to match
Height Above Ground: 99' and 103'

2. EQUIPMENT

Number and Type of Cabinets or Structures: (2) Equipment Cabinets
Cabinet / Structure Dimensions: height 55" width 25.5" depth 25.5"
Height of equipment platforms, if any: 18" above ground
Material and Color: Steel grey
Location: Inside existing compound
Method of Screening: Board on board fence

3. STRUCTURE ON WHICH ANTENNAS WILL BE MOUNTED

Maximum Height: 110'
Material: Steel
Color: Grey
If structure is within a utility right-of-way, state right-of-way width:
N/A

**MAP #: 0933 01
0003**

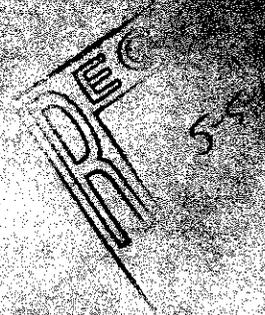
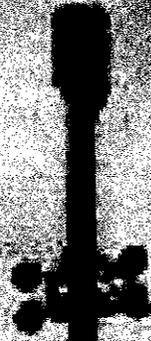
**SCHOOL BOARD
OF FAIRFAX
COUNTY**

**2709 POPKINS
LA**

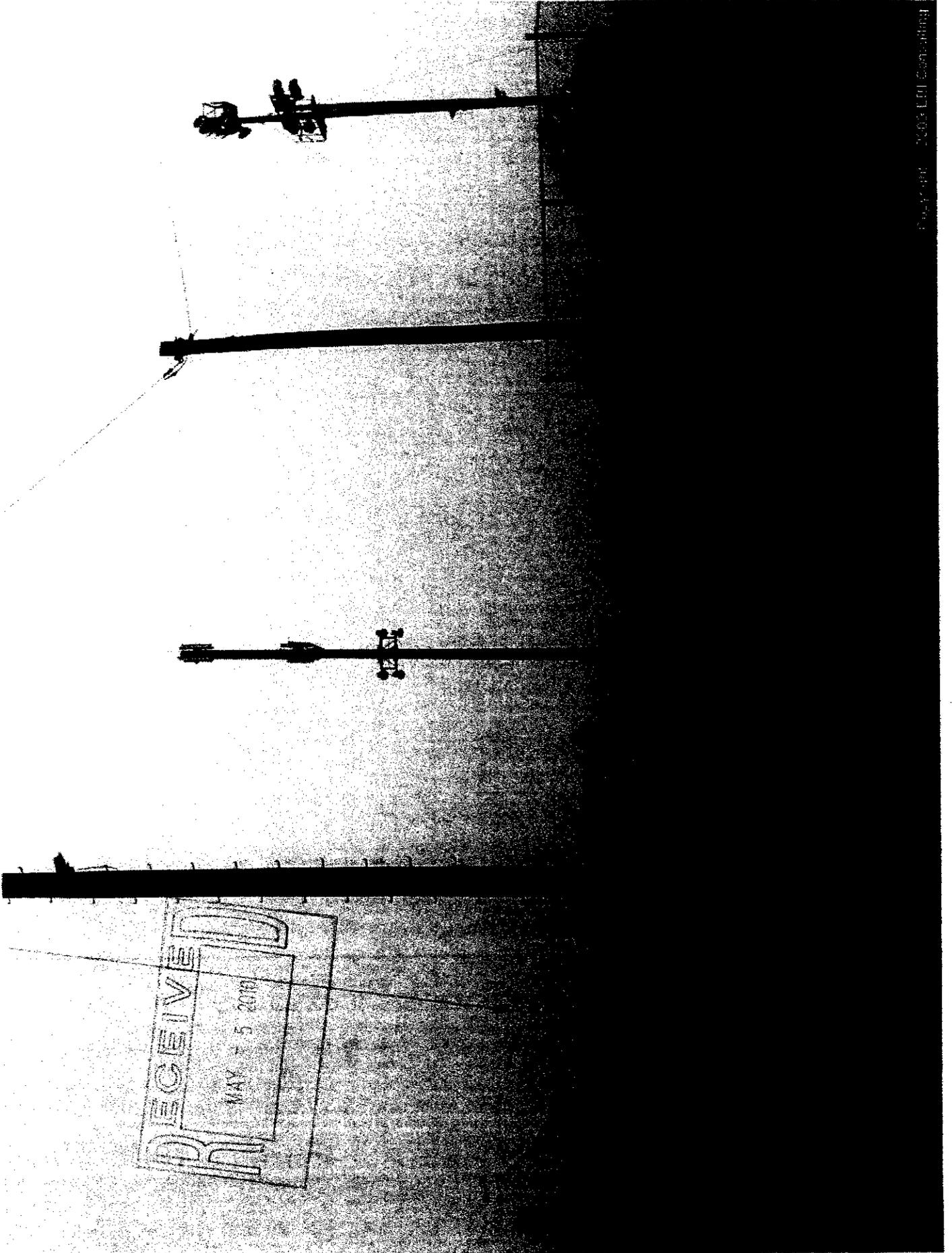


Aerial Imagery © 2007 Commonwealth of Virginia

Source: Fairfax County Department
of Tax Administration, Real Estate Division.



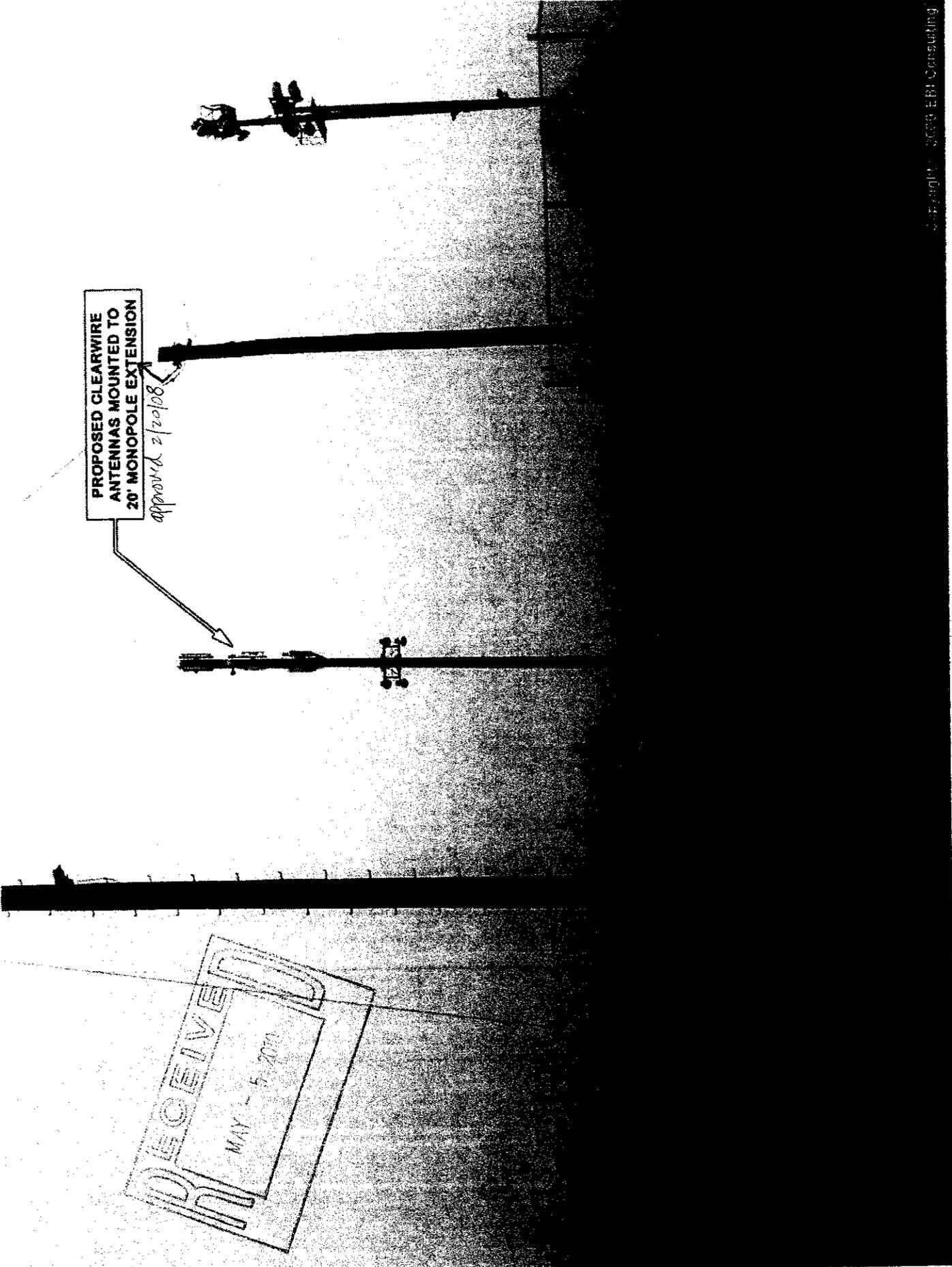
View 1



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EXISTING CONDITIONS | LOOKING SOUTH FROM HIGH SCHOOL PARKING LOT

View 1



PROPOSED CLEARWIRE
ANTENNAS MOUNTED TO
20' MONOPOLE EXTENSION

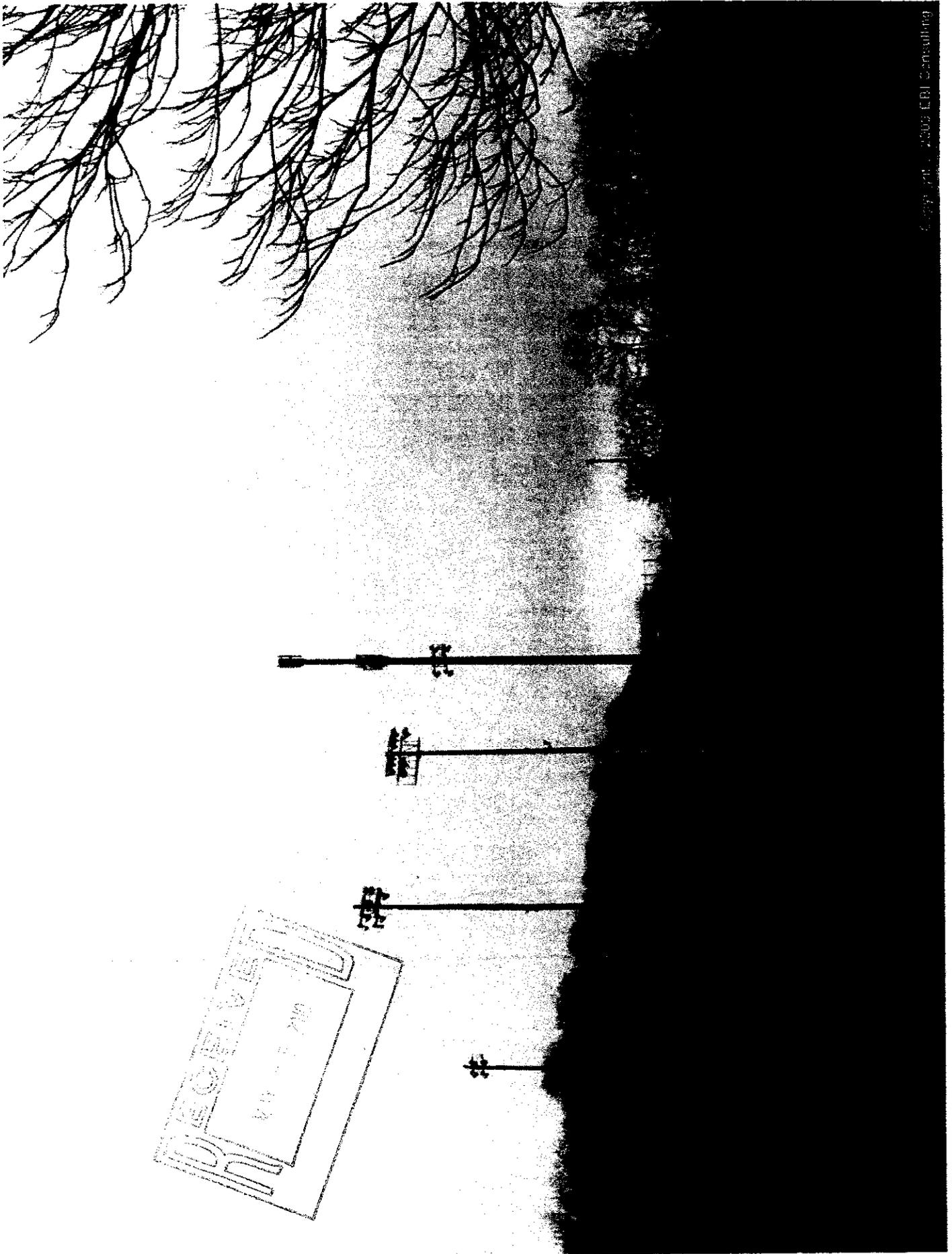
approved 2/20/08

RECEIVED
MAY - 5 - 2010

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PROPOSED CLEARWIRE INSTALLATION | LOOKING SOUTH FROM HIGH SCHOOL PARKING LOT

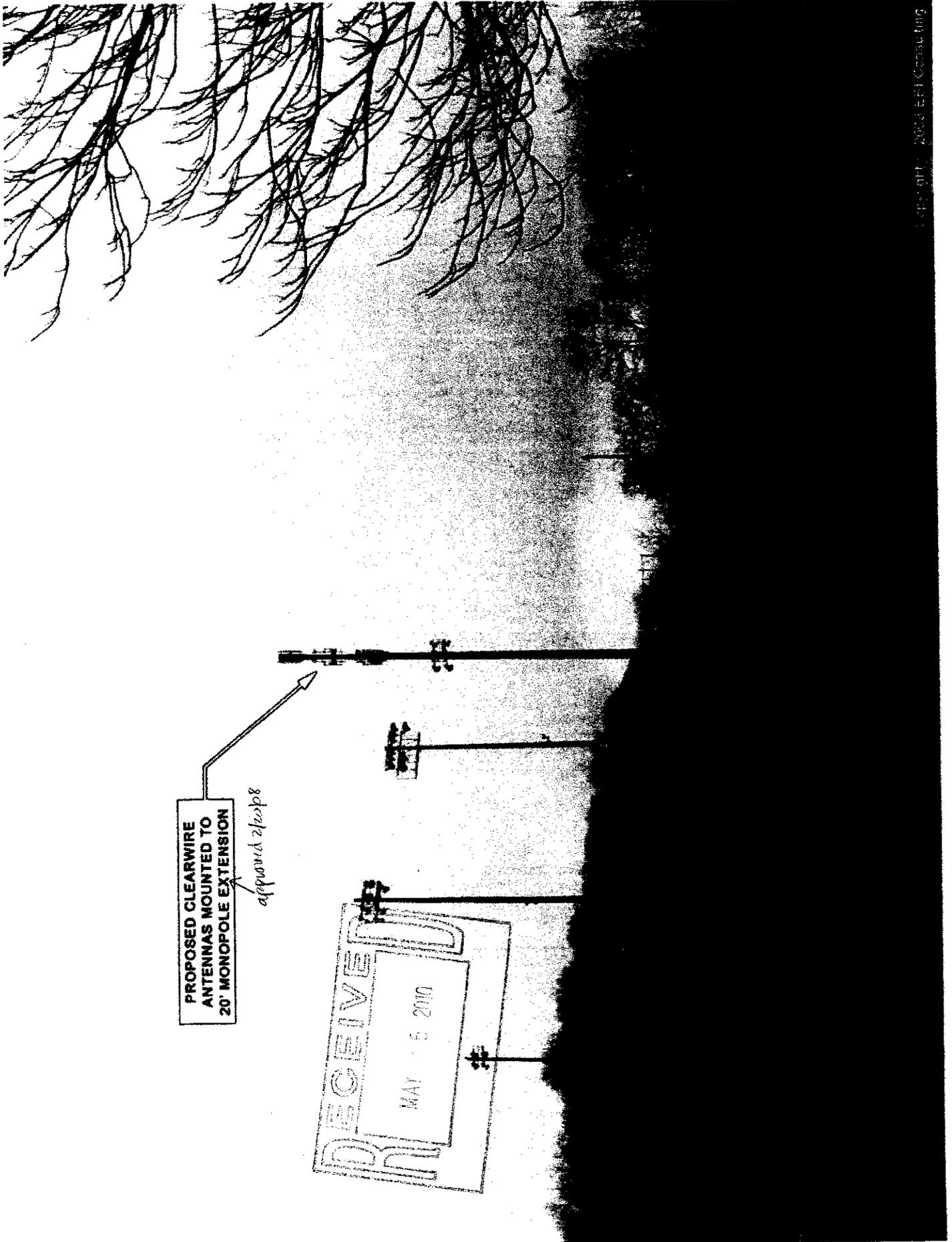
View 2



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EXISTING CONDITIONS | LOOKING SOUTHEAST FROM HIGH SCHOOL PARKING LOT

View 2



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PROPOSED CLEARWIRE INSTALLATION | LOOKING SOUTHEAST FROM HIGH SCHOOL PARKING LOT

REGATIVE

MAY - 5 2010

MEBI CONSULTING

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Burlington, MA 01803
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Fax: 781.273.3311
www.mebiconsulting.com



clearwire

343 LEXINGTON AVENUE
NEW YORK, NY 10017
OFFICE: (212) 904-7440
FAC: (212) 904-7408

THIS DOCUMENT IS THE COMMON PROPERTY OF CLEARWIRE AND THE CLIENT. IT IS TO BE USED ONLY FOR THE PROJECT AND FOR THE EXCLUSIVE USE OF THE CLIENT. IT IS NOT TO BE REPRODUCED, COPIED, OR DISTRIBUTED WITHOUT EXPRESS WRITTEN CONSENT OF THE CLIENT OR CLEARWIRE.

DRAWING SCALE: NOTED ARE AND 24.37" DRAWING SCALE: NOTED ARE AND 24.37" DRAWING SCALE: NOTED ARE AND 24.37" DRAWING SCALE: NOTED ARE AND 24.37"

NO.	DATE	DESCRIPTION	BY
1	04/03/09	FOR CONSTRUCTION	AK

PROJECT NO: 81090282

SITE NAME: VA-WS1008-a
BRYANT ALT HIGH SCHOOL
2709 POPKINS LANE
ALEXANDRIA, VA 22306

SHEET TITLE: SOUTH ELEVATION

SHEET NO: A-2

DATE: 12/04/09

RF SYSTEM REGRIDDABLE PANEL ANTENNAS (PER CLEARTRON DATE 8/10/09)

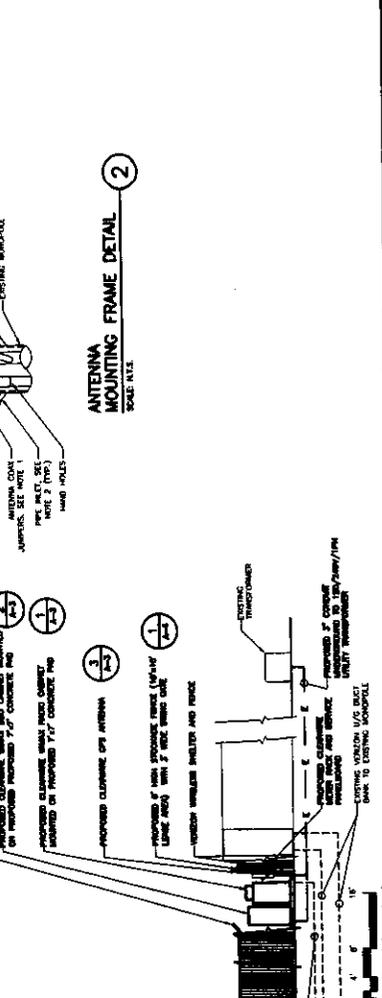
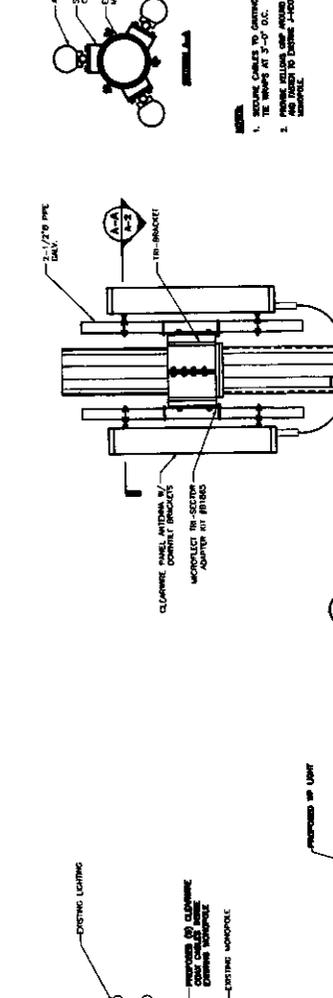
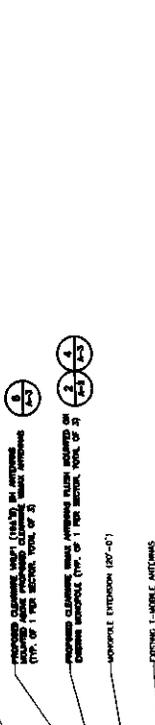
SECTOR	ANTENNA MODEL	ANTENNA TYPE	ANTENNA HGT (FT)	ANTENNA WIDTH (FT)	ANTENNA DEPTH (FT)	ANTENNA WEIGHT (LBS)	ANTENNA CENTER OF GRAVITY (FT)	ANTENNA CLEARANCE (FT)											
ALPHA	WMAK	01	12	0	2	99'-11"	150	150	150	150	150	150	150	150	150	150	150	150	150
BETA	WMAK	02	180	0	2	99'-11"	150	150	150	150	150	150	150	150	150	150	150	150	150
GAMMA	WMAK	03	200	0	2	99'-11"	150	150	150	150	150	150	150	150	150	150	150	150	150

RF SYSTEM REGRIDDABLE RADIANT ANTENNAS (PER CLEARTRON DATE 8/10/09)

SECTOR	ANTENNA MODEL	ANTENNA TYPE	ANTENNA HGT (FT)	ANTENNA WIDTH (FT)	ANTENNA DEPTH (FT)	ANTENNA WEIGHT (LBS)	ANTENNA CENTER OF GRAVITY (FT)	ANTENNA CLEARANCE (FT)											
B1 ANTENNA - 1	QTA	1	25	100'-11"	140	1/2	180	180	180	180	180	180	180	180	180	180	180	180	180
B2 ANTENNA - 2	QTA	1	25	100'-11"	140	1/2	180	180	180	180	180	180	180	180	180	180	180	180	180
B3 ANTENNA - 3	QTA	1	25	100'-11"	140	1/2	180	180	180	180	180	180	180	180	180	180	180	180	180

QUAD LINE COLOR CODING

TECH	CABLE COLOR	AMP
WMAK	PURPLE	P
WMAK	ORANGE	O
WMAK	YELLOW	Y
WMAK	BLUE	B
WMAK	GREEN	G
WMAK	RED	R
WMAK	BLACK	BLK
WMAK	WHITE	WHT



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DRAWING SCALE: NOTED ARE AND 24.37" DRAWING SCALE: NOTED ARE AND 24.37" DRAWING SCALE: NOTED ARE AND 24.37" DRAWING SCALE: NOTED ARE AND 24.37"



ENGINEER STAMP/SIGNATURE

clearwire
 343 HANCOCK AVENUE
 BEDFORD, VA 20179
 TEL: (703) 461-7400
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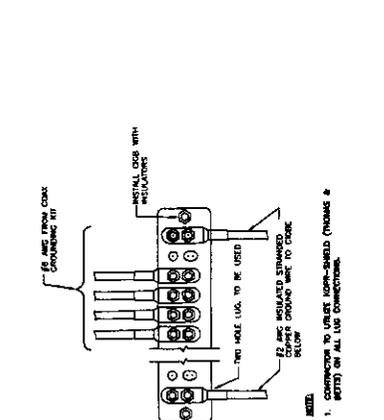
PRINTED SIZES ARE LISTED IN 3/4" X 3/4" SCALE UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.

SUBMITTALS	
NO.	DESCRIPTION
A	10/10/10 FOR CONSTRUCTION
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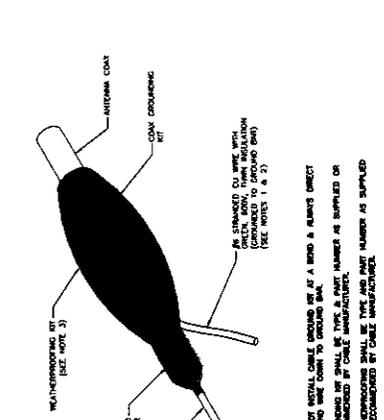
PROJECT NO: 61080282
 SITE INFO:
VA-WS1008-d
BRYANT ALT HIGH SCHOOL
 2709 FOPKINS LANE
 ALEXANDRIA, VA 22306

SHEET TITLE:
GROUNDING DETAILS

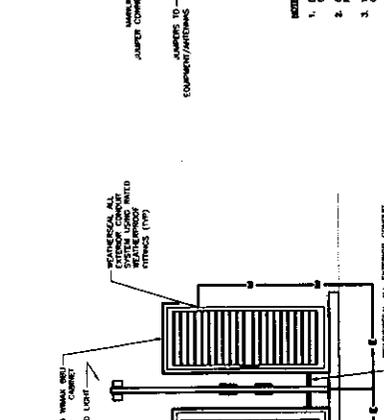
DESIGNED BY: RBJ
 CHECKED BY: RBJ
 DATE: 12/04/09
E-3



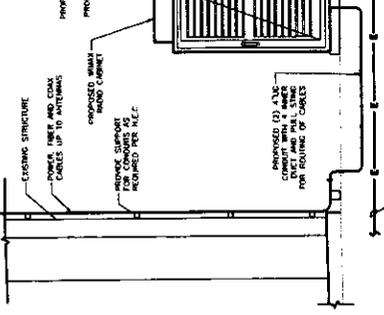
1 ELECTRICAL DETAIL (TYP.)
 SCALE: N.T.S.



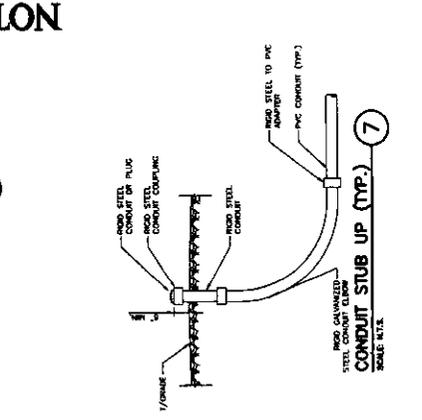
2 COAX GROUNDING KIT
 SCALE: N.T.S.



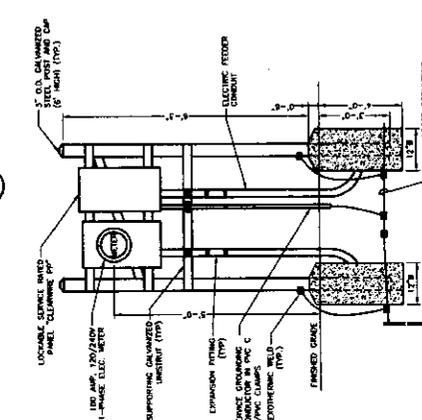
3 ANTENNA GROUND BAR DETAIL
 SCALE: N.T.S.



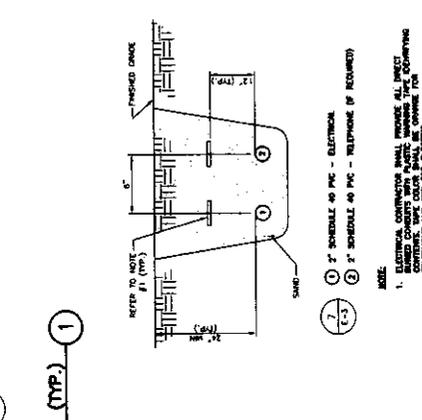
4 GROUNDING ROD DETAIL
 SCALE: N.T.S.



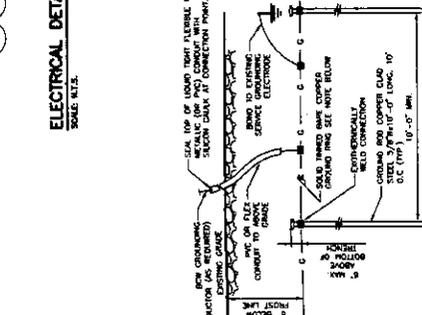
5 DUCTBANK SECTION
 SCALE: N.T.S.



6 METER BANK DETAIL
 SCALE: N.T.S.



7 FENCE POST GROUNDING DETAIL
 SCALE: N.T.S.



8 CONDUIT STUB UP (TYP.)
 SCALE: N.T.S.

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