



TOWN OF LEWISBORO  
Westchester County, New York



Planning Board  
PO Box 725  
Cross River, New York 10518

Tel: (914) 763-5592  
Fax: (914) 763-3637  
Email: [planning@lewisborogov.com](mailto:planning@lewisborogov.com)

AGENDA

Tuesday, April 21, 2015

Cross River Plaza, Cross River

Note: Meeting will start at 7:30 p.m. and end at or before 11:30 P.M.

I. DECISION

Cal# 3-14WV

Michael Bocklet, 15 South Shore Drive, South Salem Sheet 33D, Block CAMP, Lot 16 – Wetland Violation for construction within the Town of Lewisboro 150-foot wetland buffer without benefit of a Wetland Permit

II. PUBLIC HEARING

Cal# 2-15PB

NY SMSA Limited Partnership d/b/a Verizon Wireless, Lewisboro Town Park, 1065 Route 35, South Salem, Sheet 0021, Block 10541, Lots 005 & 025, (Town of Lewisboro, owner of record), – Application for Special Use Permit Approval for work associated with antenna upgrade

Cal# 39-14WP and Cal# 15-14SW

J2 Boniello Builders – Property fronting Bouton Road, South Salem, Sheet 0026, Block 10803, Lot 018 – Applications for Wetland Activity Permit Approval and Stormwater Permit Approval to construct a single family residence serviced by a septic system and drilled well - Continuation of Public Hearing

III. PROJECT REVIEW

Cal# 1-15PB

Copia Garden Center, 475 Smith Ridge Road, South Salem, Sheet 0053, Block 09834, Lots 035 & 048, (Organic Choice, Inc., owner of record) & Peter and Jennifer Cipriano, 5 East Street Sheet 0053, Block 09834, Lot 036, - Application for Sketch Plan Review/Site Development Plan for improvements to the existing Copia Garden Center including modification to curb cuts along East Street and expansion of the existing use onto adjacent tax parcel 09834-036-0053

Cal# 12-13PB and Cal# 13-14SW

Guillermo Arias, 411 Smith Ridge Road, South Salem, Sheet 0050, Block 09834, Lot 28, & Lexus Holding Company, LTD, Smith Ridge Road, South Salem, Sheet 0050, Block 09834, Lot 162 – Application for Final Subdivision Plat Approval and Stormwater Permit Approval for a two (2) lot subdivision

Cal# 3-09PB

InSite Wireless Group, LLC (InSite), 377 Smith Ridge Road, South Salem, Sheet 050A, Block 09834, Lots 84, 88, 94, (Vista Fire Department, owner of record) – Application for Special Use Permit renewal

Cal# 11-13PB and Cal# 12-15WP

O-2 Living Realty Group, LLC (Yellow Monkey Village), 792 Route 35, Cross River, New York, Sheet 0018, Block 10533, Lots 024 & 025 – Applications for Waiver of Site Development Plan Procedures and Wetland Activity Permit Approval for proposed change of use and certain site modifications, all of which require a site plan approval

IV. WETLAND VIOLATION

Cal#4-14WV and Cal# 69-14WP

James Sandler, 28 Lake Street, Goldens Bridge, Sheet 007F, Block 12663, Lot 005 – Status update

V. TOWN BOARD REFERRALS

Proposed Bed and Breakfast Ordinance – proposed change to zoning code

Proposed Hotel/Inn Ordinance – proposed change to zoning code

Multi-family Housing – proposed change of zoning to allow multi-family housing in all non-residential zoning districts

VI. DISCUSSION

Septic Compliance Administration

Stormwater Management and Erosion and Sediment Control

VII. MINUTES OF March 17, 2015

**NY SMSA LIMITED  
PARTNERSHIP**

**d/b/a**

**VERIZON  
WIRELESS**

**CAL# 2-15PB**

**TOWN OF LEWISBORO**

**NOTICE OF PUBLIC HEARING**

**NOTICE IS HEREBY GIVEN** that the Planning Board of the Town of Lewisboro, Westchester County, New York will convene a Public Hearing on Tuesday April 21, 2015, at 7:30 P.M. or soon thereafter, at the Town Offices, 20 Orchard Square, Lower Level, Cross River, New York, regarding the following:

**Cal # 2-15PB**

Application for Amended Special Use Permit Approval pertaining to communication facilities pursuant to Section 220-41.1 of the Lewisboro Zoning ordinance from New York SMSA Limited Partnership d/b/a Verizon Wireless, c/o Snyder & Snyder, LLP, 94 White Plains Road, Tarrytown, N.Y. which involves the replacement of 12 existing panel antennas with 12 new panel antennas on the existing mounting platform and the installation of one (1) GPS unit, 12 RRH units, and three (3) sector distribution boxes. Said property is owned by the Town of Lewisboro, 11 Main Street, South Salem, New York and located on the southerly side of (#1065) Old Post Road, NYS Route 35, South Salem, New York and designated on the Tax Maps of the Town of Lewisboro as Sheet 21, Block 10541, Lots 5 & 25 consisting of approximately ±60 acres and located within the R-4A Residential District. A copy of the application materials and proposed site documents may be inspected at the office of the Planning Board Secretary, 20 Orchard Square, Suite 1, Cross River, New York during the regular business hours. All interested parties are encouraged to attend the Public Hearing and will be afforded an opportunity to be heard; written comments will also be accepted.

**PLANNING BOARD  
TOWN OF LEWISBORO  
By: Jerome Kerner  
Chairman**

**Dated: April 16, 2015**

**The Town of Lewisboro is committed to equal access for all citizens. Anyone needing accommodations to attend or participate in this meeting is encouraged to notify the Secretary to the Planning Board in advance.**

**TOWN OF LEWISBORO PLANNING BOARD**

Onatru Farm, 99 Elmwood Rd, South Salem, New York 10590 TEL (914) 763-5592 / FAX (914) 763-3637  
e-mail [planning@lewisborogov.com](mailto:planning@lewisborogov.com)

**STEP II: APPLICATION FOR SPECIAL PERMIT USE APPROVAL**

Co-location of a public utility wireless communications facility R-4A  
project name zoning district

1065 Route 35 10541 5 & 25  
site location tax sheet block lot

\_\_\_\_\_ site acreage Is the site located within 500 FT of any Town boundary? YES \_\_\_ NO \_\_\_

N/A existing gross floor area Is the site located within the New York City Watershed? YES \_\_\_ NO \_\_\_

N/A proposed gross floor area Is the site located on a State of County Highway? Route # 35 YES X NO \_\_\_

Structural Consulting Services, P.C. 67 Federal Road, Brookfield, CT 06804 (203) 740-7578  
engineer's name address phone

surveyor's name address phone

ALL SUBMITTED PLANS AND DOCUMENTS SHALL BEAR AN ORIGINAL SIGNATURE, SEAL AND LICENSE NUMBER OF THE PROFESSIONAL RESPONSIBLE FOR PREPARING EACH ITEM ALL PLANS SHALL BE EQUAL IN SHEET SIZE, COLLATED INTO STAPLED FOLDED SETS. THIRTEEN (13) COMPLETE SETS ARE REQUIRED. (EXCEPT COMMERCIAL FACILITIES REQUIRE EIGHTEEN (18) SETS.)

**THE FOLLOWING MATERIALS SHALL BE ATTACHED:**

- SPECIAL USE PERMIT TYPE: Public Utility Wireless Communications Facility (indicate specific Special Use proposed). Per Section 220- 41 \_\_\_\_\_ (cite specific Special Use Section of the Zoning Ordinance).
- SPECIAL USE PERMIT SITE PLANS per Section 220-32 of the Zoning Ordinance.
- WRITTEN STATEMENT describing the special use and how it will serve to implement the intent of the underlying zone.
- ADDENDUM SITE DATE FORM attach completed Site Date Form to this application form.
- TOPOGRAPHIC SURVEY showing a 2-foot contour intervals.
- WETLAND DELINEATION per Chapter 217 Wetlands and Watercourses Law, with NYSDEC endorsement where appropriate.
- WETLAND ACTIVITY PERMIT APPLICATION FORM complete if any wetland/ 150-foot buffer activity is proposed.
- SEQR ENVIRONMENTAL ASSESSMENT FORM.
- COMPLETED AFFIDAVIT OF OWNERSHIP FORM certifying owner of record as of date of the application.
- COMPLETED AFFIDAVIT FROM RECEIER OF TAXES certifying payment of all taxes and assessments due.
- FILING FEE: See attached Application Fee Schedule Check(s) are payable to: *Town of Lewisboro.*

THE APPLICANT understands that any application is considered complete only when all information and documents required have been Submitted and received by the Planning Board and further understands that the applicant is responsible for the payment of all application and Review fees incurred by the Planning Board.  
THE UNDERSIGEND WARRANTS the truth of all statements contained herein and in all supporting documents according to the best of his or her knowledge and belief and authorizes visitation and inspection of the subject property by the Town of Lewisboro and its agents

New York SMSA Limited Partnership c/o Snyder & Snyder, LLP  
d/b/a Verizon Wireless 94 white Plains Road, Tarrytown, NY 10591 (914) 333-0700  2-14-15  
applicant's name address phone signature date

SEE ATTACHED LETTER OF AUTHORIZATION  
owner's name address phone signature date

Date of receipt by Planning Board Secretary \_\_\_\_\_ Application ID: SPU# \_\_\_\_\_

**TOWN OF LEWISBORO PLANNING BOARD**

Onatru Farm, Elmwood Road, South Salem, New York 10590 • TEL (914) 763-5592 / FAX (914) 763-3637

**ADDENDUM SITE DATA FORM**

*application type (check one)*

SITE DEVELOPMENT PLAN

SPECIAL PERMIT USE

Co-location of a public utility wireless communication facility R-4A  
**project name** *street frontage (LF)* *zoning district*  
 1065 Route 35 10541 5 & 25  
**site location** *site acreage* *tax sheet* *block* *lot*

ZONING-BULK REGULATION		REQUIRED	EXISTING	PROPOSED	TOTAL
MINIMUM YARDS [LF]	FRONT				
	SIDE	NOT APPLICABLE TO ANTENNA REPLACEMENT AND CO-LOCATION			
	REAR				
MINIMUM LANDSCAPE BUFFER [LF]	FRONT				
	SIDE	NOT APPLICABLE TO ANTENNA REPLACEMENT AND CO-LOCATION			
	REAR				
NUMBER OF DWELLING UNITS					
GROSS FLOOR AREA [SF]					
BUILDING FOOTPRINT [SF]					
BUILDING COVERAGE [% of lot]					
BUILDING HEIGHT [FT - Story]					
FLOOR AREA RATIO (F.A.R.)					
PARKING SPACES					
LOADING SPACES					
SITE COVERAGE [% of lot]					

**OFF-STREET PARKING AND LOADING CALCULATIONS**

*Provide the specific calculation used to determine the number of off-street parking and loading spaces required per the Zoning Ordinance.*

**PARKING CALCULATION (round up):** N/A

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**LOADING CALCULATION (round up):** N/A

New York SMSA Limited Partnership c/o Snyder & Snyder, LLP  
 d/b/a Verizon Wireless 94 White Plains Road, Tarrytown, NY 10591 (914) 333-0700 *[Signature]* 2-14-15  
**applicant's name** *address* *phone* *signature* *date*

**owner's name** *address* *phone* *signature* *date*

Date of receipt by Planning Administrator: \_\_\_\_\_ Application ID: SDP# \_\_\_\_\_ or SP# \_\_\_\_\_

LETTER OF AUTHORIZATION

The Town of Lewisboro, the owner ("Owner") of the property commonly known as 1065 Route 35, Lewisboro, New York and designated as Block 10541, Lots 5 & 25 on the Town of Lewisboro Tax Map ("Property"), does hereby acknowledge that New York SMSA Limited Partnership d/b/a Verizon Wireless ("Verizon Wireless"), and its authorized representatives, have the authority to consummate any applications necessary to ensure Verizon Wireless' ability to replace or otherwise modify its communications equipment at the Property.

TOWN OF LEWISBORO

By: 

Authorized Signatory

Name: Peter Parsons

Title: Supervisor

LAW OFFICES OF  
**SNYDER & SNYDER, LLP**

94 WHITE PLAINS ROAD  
TARRYTOWN, NEW YORK 10591

(914) 333-0700

FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS

**Msheridan@snyderlaw.net**

NEW YORK OFFICE  
445 PARK AVENUE, 9TH FLOOR  
NEW YORK, NEW YORK 10022  
(212) 749-1448  
FAX (212) 932-2693

LESLIE J. SNYDER  
ROBERT D. GAUDIOSO

DAVID L. SNYDER  
(1956-2012)

NEW JERSEY OFFICE  
ONE GATEWAY CENTER, SUITE 2600  
NEWARK, NEW JERSEY 07102  
(973) 824-9772  
FAX (973) 824-9774

REPLY TO:

Westchester office

April 1, 2015

Hon. Chairman Jerome Kerner  
and Members of the Planning Board  
Town of Lewisboro  
20 North Salem Road  
Cross River, New York 10590

RE: New York SMSA Limited Partnership d/b/a Verizon Wireless  
Special Permit Application for Antenna Work on the Existing Tower  
located at NYS Route 35, Lewisboro, New York

Dear Hon. Chairman Kerner and Members of the Planning Board:

As you recall, New York SMSA Limited Partnership d/b/a Verizon Wireless ("Verizon Wireless") is seeking a special permit to perform certain antenna work ("Antenna Work") on its existing facility ("Facility") on the communications tower ("Existing Tower") at the captioned site. Verizon Wireless' Antenna Work consists of the installation of replacement antennas and ancillary equipment on the Existing Tower. The Antenna Work is necessary for Verizon Wireless to be able to provide enhanced voice and data services to the area, allowing for high speed wireless data transmission.

At your March 17, 2015 meeting, this Honorable Board reviewed Verizon Wireless' special permit application, discussed the comments from the Town Planner, Mr. Johannessen, dated March 10, 2015 ("Planner Memo") and scheduled a public hearing for April 21, 2015. As indicated in the Planner Memo, the existing Special Permit for the Facility is valid for five (5) years, until December 13, 2016. As we are currently before this Honorable Board with regard to a special permit in connection with the Facility and Existing Tower, we request that the Board also grant a renewal of the existing special permit for an additional five (5) years.

In connection with the remaining comments from the Planner Memo, Verizon Wireless hereby submits eighteen (18) copies of the revised environmental assessment form ("EAF"), antenna/equipment volume calculations, and Step II of the application<sup>1</sup>, together with the special permit fee. In response to the Planner Memo and the Planning Board comments, please note the following:

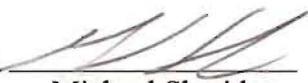
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<sup>1</sup>Kindly note that Verizon Wireless has submitted a memo in support of its Special Use Permit Application, dated February 19, 2015, as a part of its Sketch Plan Application.

1. The short EAF has been revised pursuant to the Planner Memo and also now includes Part 2 of the EAF.
2. Enclosed herewith are calculations prepared by Verizon Wireless' engineer Structural Consulting Services, P.C. ("SCS"), indicating the existing and proposed antenna/equipment volume expressed in cubic feet.
3. Pursuant to comments made by this Board, attached hereto please find a revised structural letter from SCS, which confirms that "the proposed modifications will not impact the tower's ability to accommodate four (4) additional future carriers as it was originally designed."
4. Finally, please note that, at the Board's request, we have also forwarded a notification letter to the Westchester County Parks Commission. A copy of same is attached hereto for your reference.

Due to the nature of Verizon Wireless' Antenna Work on the Existing Tower, it should be noted that under Section 220-41.1(H)(2) of the Town Zoning Code, Verizon Wireless' application is required to be processed in an expedited manner. Moreover the Middle Class Tax Relief and Job Creation Act of 2012 ("TRA"), signed by the President on February 22, 2012, contains Section 6409 which specifically provides that a local government "may not deny, and shall approve" an application for "collocation of new transmission equipment" or "replacement of transmission equipment" on an existing wireless tower or base station that does not "substantially change the physical dimensions of such tower or base station." In accordance with the foregoing, we respectfully request that the Planning Board approve Verizon Wireless' special permit for its Antenna Work forthwith and renew the existing special permit for an additional five (5) years. If you have any questions, please do not hesitate to call me or Leslie Snyder at (914) 333-0700.

Respectfully submitted,  
Snyder & Snyder, LLP

By: 

Michael Sheridan

MS:sm

cc: Verizon Wireless

Structural Consulting Services, P.C.

Z:\SSDATA\WPDATA\SS4\WP\NEWBANM\Joe Rollins\LTE Zoning Analyses\Cross River Relo (Lewisboro)\PB Response letter.wpd

# Short Environmental Assessment Form

## Part 1 - Project Information

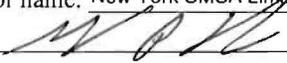
### Instructions for Completing

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b>			
New York SMSA Limited Partnership d/b/a Verizon Wireless			
Name of Action or Project: Modification to Verizon Wireless Public Utility Wireless Telecommunications Facility			
Project Location (describe, and attach a location map): 1065 Route 35, Lewisboro, NY			
Brief Description of Proposed Action: Installation of replacement antennas together with ancillary equipment on the existing tower.			
Name of Applicant or Sponsor: New York SMSA Limited Partnership d/b/a Verizon Wireless		Telephone: 914-333-0700	
		E-Mail: lsnyder@snyderlaw.net	
Address: c/o Snyder & Snyder LLP, 94 White Plains Road			
City/PO: Tarrytown, NY		State: NY	Zip Code: 10591
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Special Permit - Planning Board Building Permit - Building Department			NO <input type="checkbox"/>
			YES <input checked="" type="checkbox"/>
3.a. Total acreage of the site of the proposed action?		0.0826 +/- acres	
b. Total acreage to be physically disturbed?		0 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		0.0826 +/- acres	
4. Check all land uses that occur on, adjoining and near the proposed action.			
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Other (specify): <u>Parkland</u>			
<input type="checkbox"/> Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: <u>Name:County &amp; State Park Lands, Reason:Exceptional or unique character, Agency:Westchester County, Date:1-31-90</u> <span style="float:right">*N/A - Proposed action is on an existing tower</span>	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply?  If No, describe method for providing potable water: _____ N/A - the Public Utility Telecommunications Facility is unmanned	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities?  If No, describe method for providing wastewater treatment: _____ N/A - the Public Utility Telecommunications Facility is unmanned	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? <span style="float:right">*N/A - Proposed action is on an existing tower</span>	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16. Is the project site located in the 100 year flood plain? <span style="float:right">*N/A - Proposed action is on an existing tower</span>	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <span style="float:right"><input type="checkbox"/> NO    <input type="checkbox"/> YES</span>	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ _____ _____	<b>NO</b>  <input checked="" type="checkbox"/>	<b>YES</b>  <input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____ *N/A - Proposed action is on an existing tower _____	<b>NO</b>  <input checked="" type="checkbox"/>	<b>YES</b>  <input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____ _____	<b>NO</b>  <input checked="" type="checkbox"/>	<b>YES</b>  <input type="checkbox"/>
<b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b>		
Applicant/sponsor name: <u>New York SMSA Limited Partnership d/b/a Verizon Wireless</u> Date: <u>3/30/15</u>		
Signature: By: <u></u> , as attorney		

Project:

Date:

**Short Environmental Assessment Form  
Part 2 - Impact Assessment**

**Part 2 is to be completed by the Lead Agency.**

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. public / private water supplies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Project:

Date:

### **Short Environmental Assessment Form Part 3 Determination of Significance**

For every question in Part 2 that was answered “moderate to large impact may occur”, or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

- Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
- Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Town of Lewisboro Planning Board

Name of Lead Agency

Date

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (if different from Responsible Officer)

**PRINT FORM**



**STRUCTURAL  
CONSULTING  
SERVICES, P.C.**

March 27, 2015

Honorable Chairman Kerner and  
Members of the Planning Board  
Town of Lewisboro  
99 Elmwood Road  
South Salem, NY 10590

Re: New York SMSA Limited Partnership d/b/a Verizon Wireless  
Site: Cross River  
1065 Route 35, Lewisboro, NY  
Tax Map Sheet 21, Block 10541, Lot 25

Dear Honorable Chairman Kerner and Members of the Planning Board:

New York SMSA Limited Partnership d/b/a Verizon Wireless is proposing to replace all twelve (12) of their existing panel antennas on the existing 160'+/- monopole at the above referenced site with like kind panel antennas and related appurtenances as shown on the construction drawings prepared by our office, drawing C-1 and C-2 dated 2/13/15. The replacement antennas and accessory equipment will be at the same height as the existing antennas.

Our office has reviewed the proposed antenna configuration for its affect on the existing tower. The proposed modifications will not impact the towers ability to accommodate four (4) additional future carriers as it was originally designed. In our professional opinion, the existing monopole and foundation can accommodate the proposed antenna replacement. Should you have any questions, please do not hesitate to contact our office.

Sincerely,

Structural Consulting Services, P.C.

James H. Fahey, P.E., S.E.  
Principal

JHF/jhf



67 Federal Road, Brookfield, CT 06804  
Tel: 203.740.7578 Fax: 203.775.5670

Equipment		(in)	(in)	(in)	(ft^3)	(ft^3)
<b>VZW Proposed</b>	Num	x	y	z	Cubic Feet per unit	Total Cubic Feet
QAP-480-VRO	6	12.5	50.5	7.1	2.59	15.56
X7CAP-480-VRO	6	14.8	50.5	7.1	3.07	18.43
RRH 850	3	10.6	36.6	5.75	1.29	3.87
RRH 700	3	15	15.7	8	1.09	3.27
RRH PCS	3	11.2	20.1	10.7	1.39	4.18
RRH AWS	3	12	25	9	1.56	4.69
Raycap Distribution Box	3	15.75	29	10.3	2.72	8.17
					<b>13.72</b>	<b>58.17</b>

Existing		(in)	(in)	(in)	(ft^3)	(ft^3)
<b>VZW Existing</b>	Num	x	y	z	Cubic Feet per unit	Total Cubic Feet
Antel BXA-70080-4CF	6	8	47.5	5.9	1.30	7.78
Antel BXA-171085/8CF	6	6.1	48.5	4.1	0.70	4.21
					<b>2.00</b>	<b>12.00</b>

Note: Values are approximate and should not be used other than for estimating purposes

LAW OFFICES OF  
**SNYDER & SNYDER, LLP**

94 WHITE PLAINS ROAD  
TARRYTOWN, NEW YORK 10591

(914) 333-0700

FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS

[msheridan@snyderlaw.net](mailto:msheridan@snyderlaw.net)

NEW YORK OFFICE  
445 PARK AVENUE, 9TH FLOOR  
NEW YORK, NEW YORK 10022  
(212) 749-1448  
FAX (212) 932-2693

LESLIE J. SNYDER  
ROBERT D. GAUDIOSO

DAVID L. SNYDER  
(1956-2012)

NEW JERSEY OFFICE  
ONE GATEWAY CENTER, SUITE 2600  
NEWARK, NEW JERSEY 07102  
(973) 824-9772  
FAX (973) 824-9774

REPLY TO:

Tarrytown Office

April 1, 2015

Westchester County Department of Parks,  
Recreation and Conservation  
25 Moore Avenue  
Mt. Kisco, NY 10549  
Attention: David DeLucia, Director of Park Facilities

RE: New York SMSA Limited Partnership d/b/a Verizon Wireless  
Antenna Work on the Existing Tower  
located at 1065 Route 35, Lewisboro, New York

Dear Director DeLucia:

New York SMSA Limited Partnership d/b/a Verizon Wireless has been working with the Town of Lewisboro to perform certain antenna replacement work ("Antenna Work") to Verizon Wireless' existing facility on the communications tower at the captioned site. The Antenna Work is necessary for Verizon Wireless to provide enhanced voice and data services to the area, allowing for high speed wireless data transmission.

In connection with the Antenna Work, the Town of Lewisboro Planning Board requested that the Westchester County Department of Parks be notified. Please note that as the proposed work is a modification to an existing facility, it will not adversely impact the county park.

If you have any questions please do not hesitate to call me at 914-333-0700.

Respectfully submitted,  
Snyder & Snyder, LLP

By:



Michael Sheridan

cc: Verizon Wireless

Z:\SSDATA\WPDATA\SS4\WP\NEWBANM\Joe Rollins\LTE Zoning Analyses\Cross River Relo (Lewisboro)\County Parks Ltrdoc.REV.2.doc

**J2 BONIELLO  
BUILDERS**

**CAL# 39-14WP**

March 19, 2015

Dear Planning Board:

I have the following comments concerning the public hearing last Tuesday, March 17, 2015, regarding the wetland application at lot 43.3-1-5. Thank you for your time and patience in reviewing this.

I stand by my statement that the area in question near the proposed house site has at least six species of wetland indicator plants that are classified as 'Facultative Wetland Plants', that is, usually occurring in wetlands (estimated probability 67-99%) and 'Obligate Wetland Plants', that is, occurring almost always (estimated probability greater than 99%) in wetlands and the area should be, therefore, classified as a wetland.

At the hearing, the applicant's wetland consultant attempted to correct me, saying (paraphrasing her comments) that I was mistaken and that facultative plants are only likely to occur in wetlands half the time, the other half the time occurring outside of wetlands.

The distinction is critical and I believe I am correct. The following is taken from page 4 and page 43 of the New York State DEC Freshwater Wetlands Delineation Manual<sup>1</sup>

***Plant Indicator Status Categories<sup>2</sup>***

- (1) ***OBLIGATE WETLAND PLANTS (OBL)*** that occur almost always (estimated probability >99%) in wetlands under natural conditions;
- (2) ***FACULTATIVE WETLAND PLANTS (FACW)*** that usually occur in wetlands (estimated probability 67-99%), but occasionally are found in non-wetlands;
- (3) ***FACULTATIVE PLANTS (FAC)*** that are equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%); and
- (4) ***FACULTATIVE UPLAND PLANTS (FACU)*** that usually occur in non-wetlands but occasionally are found in wetlands (estimated probability 1-33%).

The following are the plant species I located in the disputed wetland, along with their classification as Obligate (OBL) or Facultative Wetland (FACW), again taken from the New York State Freshwater Wetlands Delineation Manual:

**APPENDIX A: FIELD FORMS - FRESHWATER WETLAND PLANT LIST AND FIELD INSPECTION SHEET<sup>3</sup>**

- \_\_\_ Bulrush, Soft Stem **Scirpus validus** OBL
- \_\_\_ Bulrush, Hard Stem **Scirpus acutus** OBL
- \_\_\_ Willow, Black **Salix nigra** FACW
- \_\_\_ Willow, Pussy **Salix discolor** FACW
- \_\_\_ Reedgrass, **Phragmites australis** FACW
- \_\_\_ Winterberry, Holly **Ilex verticillata** FACW
- \_\_\_ Sensitive Fern **Onoclea sensibilis** FACW

---

<sup>1</sup> New York State Freshwater Delineation Manual, [http://www.dec.ny.gov/docs/wildlife\\_pdf/wdelman.pdf](http://www.dec.ny.gov/docs/wildlife_pdf/wdelman.pdf)

<sup>2</sup> New York State Freshwater Delineation Manual, page 4.

<sup>3</sup> New York State Freshwater Delineation Manual, page 43

Wetlands in Lewisboro are delineated by soils AND/OR vegetation and the presence of these willows, bulrush, winterberry, sensitive ferns and phragmites (reedgrass)-all of which are obligate or facultative wetland species-are evidence that the disputed area is a wetland.

It may be the case that the town's wetlands inspector never walked this section of the property, assuming the wetlands were located only next to the Waccabuc River, a perfectly logical assumption. This may explain why he agreed with the applicant's consultant's wetland delineation.

Some on your board objected to having the applicant consult an independent wetland consultant, an action which the board is allowed to take by law. Though no decision was reached on the matter, perhaps a reasonable alternative is to simply ask the town wetland inspector, along with one or more members of your board, along with the applicant's consultant, to do a site walk to the disputed wetland. Exact locations (latitude and longitude coordinates) of the facultative wetland and obligate wetland plants can be found on the attached map. I'm confident that with very little additional time or expense on your part or by the applicant that a conclusion to the delineation of this disputed area can be reached.

Should the disputed area be, in fact, a wetland of approximately .25 acres, then the proposed location of the home would be in both the 150-foot and the 100-foot wetland buffers (see attached map). A reasonably feasible on-site alternative to the proposed activity that could reasonably accomplish the applicant's objectives is to reduce the footprint of the proposed home, making it comparable in size to the adjacent three bedroom home to the north. This would reduce the impacts on the wetland and buffer, reduce stormwater discharge, reduce flooding risk, reduce overall impacts, be in keeping with the character of the neighborhood, and give the applicant ample financial returns – the favorable outcome for all parties which we all desire.

One final comment, the question as to whether the new, more stringent stormwater regulations apply to this project or if the project is somehow 'grandfathered' was not settled. I wonder if the town's attorney can weigh in on this matter.

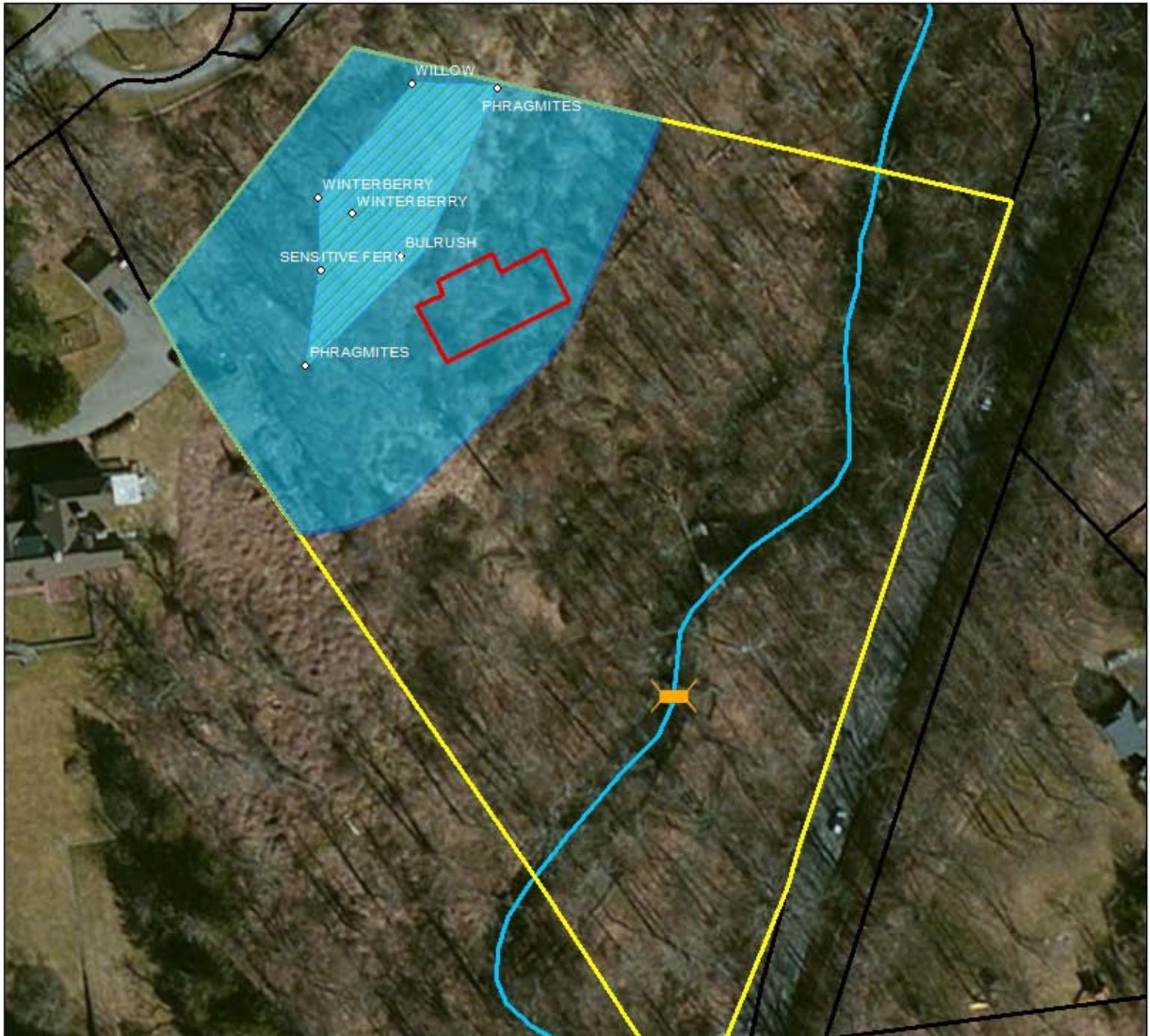
Thank you again for all the time and effort you put into serving the Town of Lewisboro.

Sincerely,

Jim Nordgren

# Lot 43.3-1-5

## Wetland Indicator Plants & 100 Foot Wetland Buffer



**Legend**

- Proposed House Footprint
- 100 Foot Buffer
- Disputed Wetland Boundary-Western Wetland
- Boniello Lot
- Waccabuc River
- Tax Parcels

FID	Shape *	type	ident	Latitude	Longitude
0	Point Z	WAYPOINT	BULRUSH	41.277525	-73.577617
1	Point Z	WAYPOINT	PHRAGMITES	41.277342	-73.577783
3	Point Z	WAYPOINT	SENSITIVE FERN	41.277502	-73.577795
6	Point Z	WAYPOINT	WINTERBERRY	41.277597	-73.577722
7	Point Z	WAYPOINT	WILLOW	41.277812	-73.577587
8	Point Z	WAYPOINT	WINTERBERRY	41.277624	-73.577799

Source:  
US, USF  
User Co

Date: March 19, 2015





**Evans Associates**  
Environmental Consulting, Incorporated

March 24, 2015

Jerome Kerner, Chairman  
Lewisboro Planning Board  
20 Cross River Shopping Center at Orchard Square  
Suite L (Lower Level)  
Cross River, NY 10518

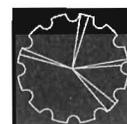
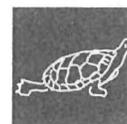
**RE: J2 Boniello Builders  
2 Bouton Road  
Sheet 26 Block 10803 Lot 18  
Wetland Permit Application**

Dear Chairman Kerner and Members of the Planning Board:

In response to the comments received at the Public Hearing on this application, as well as comments contained in both the January 15, 2015 Conservation Advisory Council (CAC) memo and the January 21, 2015 memo from Kellard Sessions Consulting, PC, I offer the following information for your consideration:

1) **Revisions to the Mitigation Plan** - In preparation for the Public Hearing, we revised the proposed Mitigation Plan, now dated March 17, 2015, to include the previously proposed 15,448 square feet of buffer restoration in the proposed Conservation Easement Area. As part of the subdivision which created this parcel in 1988, Note #1 on the filed plat required that the "land between Bouton Road and the Waccabuc River, with the exception of the driveway, be identified as an area to be left undisturbed in order to serve as a buffer area." This area comprises 27,508 square feet, or 0.62 acres (15%), of the 4.01 acre lot which was created. In accordance with the Town of Lewisboro Mitigation Plan Guidelines, we are proposing to protect an additional 1.02 acres of the parcel under the proposed Conservation Easement Area. Altogether, the proposed Conservation Easement Area will permanently protect 40% of the lot from *any* future development, and will preserve the greenbelt surrounding this portion of the Waccabuc River.

2) **Proposed Disturbance within the Regulated Area** - With the exception of the driveway and the stormwater management facilities, we note that the majority of the disturbance proposed within the regulated wetland buffer on this lot occurs *more than 100'* from the wetland edge, and there is *no direct wetland disturbance* whatsoever. Out of a



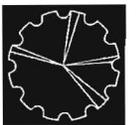
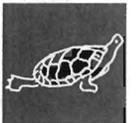
205 Amity Road  
Bethany, CT 06524  
Tel: 203.393.0690  
Fax: 203.393.0196

total wetland buffer disturbance of 57,467 square feet, or 1.2 acres, only 8,300 square feet of disturbance, or 0.2 acres, is associated with the house and septic area, and that 0.2 acres is entirely within previously disturbed portions of the site. Moving the house outside of the regulated buffer area would push the disturbance, including grading and tree removal, into the steeper slopes in the western portion of the lot, which are currently forested with second growth mixed hardwoods. In addition, the majority of the buffer disturbance associated with the septic fields is the result of the grading required to accommodate the proposed impervious berm which will surround the downhill portion of the leach field area as an added protection to the wetlands and the river. As the Board knows, it is not possible to move the septic fields into the steeper slopes due to Health Department regulations.

3) **Presence of Facultative Wetland Species** - Finally, Jim Nordgren's claims that the presence of a handful of plants found scattered across the western portion of the site confirms that the area is a wetland is misleading, at best. The *Wetlands Delineation Report* dated October 14, 2014, and prepared by our office for this application was based on a wetland delineation performed by a Certified Professional Soil Scientist *and* a Certified Professional Wetland Scientist with an undergraduate degree in botany. The report lists the representative plant species that were observed in both the wetland and upland portions of the site, and was not intended to be a complete inventory of all plant species found on the site. As the report documents, a mixture of upland and wetland vegetation is found throughout the site, and each species is listed in the report according to where they were found, with many species being found in both uplands and wetlands.

The Lewisboro Wetlands and Watercourses Law (L.L. No. 1-2004) defines a wetland as "all areas that comprise hydric soils *and/or are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation*" [emphasis added]. The law also defines hydrophytic vegetation as "*the sum of those dominant plant species* [emphasis added] occurring in a wetland that are designated as Facultative (FAC), Facultative Wetland (FACW) and/or Obligate Wetland (OBL) as recorded in the National List of Plant Species that Occur in Wetlands: Northeast (Region 1) or the National List of Plant Species that Occur in Wetlands: New York, developed by the U.S. Department of the Interior Fish and Wildlife Service in cooperation with the National and Regional Wetland Plant Review Panels, as amended and updated from time to time."

The species listed by Mr. Nordgren are by no means the "dominant plant species" in the western portion of the site, and therefore they do not represent a "prevalence of hydrophytic vegetation." As no hydric soils were found in this portion of the property by our office, it remains our professional opinion that the regulated wetlands are properly mapped and documented on this site.



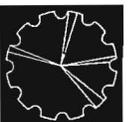
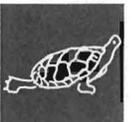
We look forward to your review of the revised Mitigation Plan at the continuation of the Public Hearing at the April meeting. If you have any questions regarding the submitted materials, please feel free to contact us at (203) 393-0690.

Sincerely,

EVANS ASSOCIATES ENVIRONMENTAL CONSULTING, INC.



Beth Evans, PWS





# **BIBBO ASSOCIATES, L.L.P.**

*Consulting Engineers*

Joseph J. Buschynski, P.E.

Timothy S. Allen, P.E.

Sabri Barisser, P.E.

March 31, 2015

Lewisboro Planning Board  
20 North Salem Road  
P.O. Box 725  
Cross River, NY 10518

Attn: Jerome Kerner, AIA, Chairman

Re: J-2 Boniello Builders  
Wetland Application  
2 Bouton Road

Dear Members of the Board:

On behalf of our client please find attached the following in support of the above referenced project:

- 10 – Prints – Plan Set (rev. 3/29/2015)
- 10 – Prints – Overall Watershed Map ( dated 3/24/15)
- 10 – Copies – Flood Plain Analysis (dated 3/31/15)

Our office has revised the plans pursuant to the January 21, 2015 memorandum prepared by Kellard Sessions Consulting, PC. We offer the following responses for the Board's consideration:

**Plan Comments:**

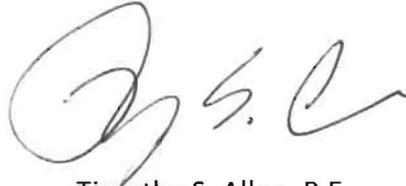
1. Comment addressed in memo dated 3/24/15 by Evans Associates Environmental Consulting Inc.
2. Comment addressed in memo dated 3/24/15 by Evans Associates Environmental Consulting Inc.

*Site Design ♦ Environmental*

3. Monuments have been proposed to demarcate the proposed conservation easement, their locations have been proposed by Evans Associates Environmental Consulting Inc., the proposed locations have been shown on our plans as well as the Wetland Mitigation Plan.
4. A draft conservation easement will be provided once the limits of the conservation easement are finalized.
5. As previously discussed, See attached Flood Plain Narrative and overall watershed map.
6. A note has been added to the plan requiring the installation of a sediment trap. A detail of the Catch Basin Trap has also been added to the plan.
7. As previously stated, based on numerous test holes performed on this property throughout the years, groundwater is anticipated at 3 ½ - 4 feet below the surface in the area of the proposed pocket wetland. The bio-retention practice requires a minimum separation to ground water of 2'. Based on previous soil testing in the area of this practice the groundwater elevation anticipated is greater than 2' below the bottom elevation of 435.0, meeting the requirements for bio-retention. We therefore certify that the Stormwater practices proposed meet the intended goals and no further testing is required. Although unforeseen but in the event groundwater is encountered in the location of the bio-retention we will contact the Town consulting engineer and redesign the practice with a liner as our office has successfully done in the past.
8. A proposed guide rail has been shown on the plan to replace the existing rail. A detail has been added to the plan.
9. The filter media specified in Table H.2 – "Planting Soil Characteristics" from the New York State Stormwater Management Design Manual has been added to the bio-retention basin detail.
10. We will contact NYSEG the area's utility provider and proceed following there review of the plan as they deem necessary.
11. The Town's standard signature blocks have been added to all sheets of the plan set. Evans Associates Environmental Consulting Inc. will also be adding the signature blocks to their wetland mitigation plan

We look forward to continuing our discussions on this matter.

Very Truly Yours,

A handwritten signature in black ink, appearing to read 'T.S. Allen', with a large, stylized initial 'T'.

Timothy S. Allen, P.E.

TSA/rh  
Enclosures

cc: G. Boniello  
Evan Associates

**COPIA GARDEN  
CENTER**

**CAL# 1-15PB**

**TOWN OF LEWISBORO PLANNING BOARD**  
P. O. Box 725, Cross River, New York 10518 TEL (914) 763-5592 / FAX (914) 763-3637  
e-mail [planning@lewisborogov.com](mailto:planning@lewisborogov.com)

**STEP II: APPLICATION FOR SITE DEVELOPMENT PLAN APPROVAL**

COPA HOME AND GARDEN - AMEND SITE PLAN GENERAL BUSINESS (GB)  
project name zoning district

475 SMITH RIDGE RD + 5 EAST ST. 53 9834 35/48 + 36  
site location tax sheet block lot

35/48 = 1.161  
36 = .723 site acreage Is the site located within 500 FT of any Town boundary? YES \_\_\_ NO X  
35/48 = 10,210  
36 = 3,645 existing gross floor area Is the site located within the New York City Watershed? YES \_\_\_ NO X  
35/48 + 36 =  
18,156 proposed gross floor area Is the site located on a State of County Highway? Route # 123 YES X NO \_\_\_

DAVID W. COFFIN, AIA 110 WOOD RD, BEDFORD HILLS, NY 10507 (914) 244-1656  
engineer's name ARCHITECT address phone

RKW LAND SURVEYING 22 EAST AVE, NEW CANAAN, CT 06840 (203)-966-3501  
surveyor's name address phone  
FRANK WALSH - x 12

ALL SUBMITTED PLANS AND DOCUMENTS SHALL BEAR AN ORIGINAL SIGNATURE, SEAL, AND LICENSE NUMBER OF THE PROFESSIONAL RESPONSIBLE FOR PREPARING EACH ITEM. ALL PLANS SHALL BE EQUAL IN SHEET SIZE, COLLATED INTO STAPLED AND FOLDED SETS. THIRTEEN (13) COMPLETED SETS ARE REQUIRED.

**THE FOLLOWING MATERIALS SHALL BE ATTACHED:**

- ✓ SITE DEVELOPMENT PLAN per Section 220-46 of the Zoning Ordinance.
- SUPPORTING CONSTRUCTION PLANS, PROFILES AND DETAILS per Section 220-46 of the Zoning Ordinance. TOO FOLLOW
- ✓ WRITTEN NARRATIVE describing the environmental character, physical features and scope of the proposed action.
- ✓ ADDENDUM SITE DATA FORM attach completed Site Data Form to this application form.
- TOPOGRAPHIC SURVEY showing 2-foot contour intervals.
- WETLAND DELINEATION per chapter 217 Wetlands and Watercourses Law, with NYSDEC endorsement where appropriate. TOO FOLLOW
- WETLAND ACTIVITY PERMIT APPLICATION FORM complete if any wetlands /150- buffer activity is proposed. Too Follow
- ✓ SEQR ENVIRONMENTAL ASSESSMENT FORM.
- PREVIOUS SUBMIT ✓ COMPLETED AFFIDAVIT OF OWNERSHIP FORM certifying owner of record as of date of the application.
- COMPLETED AFFIDAVIT FROM RECEIVER OF TAXES certifying payment of all taxes and assessments due.
- FILING FEE: See attached Application Fee Schedule. Check(s) are payable to Town of Lewisboro.

THE APPLICANT understands that any application is considered complete only when all information and documents required have been Submitted and received by the Planning Board and further understands that the applicant is responsible for the payment of all application and Review fees incurred by the Planning Board.  
THE UNDERSIGEND WARRANTS the truth of all statements contained herein and in all supporting documents according to the best of his or her knowledge and belief and authorizes visitation and inspection of the subject property by the Town of Lewisboro and its agents.

JENNIFER & PIETRO CIPRIANO & R. applicant's name address phone  
475 SMITH RIDGE ROAD, VISTA, NY 10590 owner's name address phone  
Date of receipt by Planning Board Secretary APR 01 2015 Application ID: SDP# 1-15 PB

David W. Coffin 4/01/15  
signature date  
DAVID W. COFFIN AIA  
signature date  
FOR APPLICANT

BY: [Signature]

**TOWN OF LEWISBORO PLANNING BOARD**

Onatru Farm, Elmwood Road, South Salem, New York 10590 • TEL (914) 763-5592 / FAX (914) 763-3637

**ADDENDUM SITE DATA FORM**

application type (check one)

**SITE DEVELOPMENT PLAN**

**SPECIAL PERMIT USE**

<b>COPIA HOME AND GARDEN-AMEND SITE</b>	<b>(W) 198.76' (S) 445.6'</b>	<b>GENERAL BUSINESS (GB)</b>		
<i>project name</i>	<i>street frontage (LF)</i>	<i>zoning district</i>		
475 SMITH RIDGE ROAD + 5 EAST STREET, VISTA, NY	1.884 A	53	9834	35/48+36
<i>site location</i>	<i>site acreage (82,067 SF)</i>	<i>tax sheet</i>	<i>block</i>	<i>lot</i>

ZONING BULK REGULATION		REQUIRED	EXISTING	PROPOSED	TOTAL
MINIMUM YARDS [LF]	FRONT	20' (W&S)	50.1' (W) 30.4'(S)	50.1' (W) 34' (S)	50.1' (W) 34' (S)
	SIDE	30' (E)	92.8' (E)	65' (E) STORAGE	65' (E) STORAGE
	REAR	30' (N)	19.6' to Shed (N)	30' (N)	30' (N)
MINIMUM LANDSCAPE BUFFERS [LF]	FRONT	15' (W&S)	15' (W&S)	15' (W&S)	15' (W&S)
	SIDE	30' (E)	30' (E)	30' (E)	30' (E)
	REAR	30' (N)	30' (N)	30' (N)	30' (N)
NUMBER OF DWELLING UNITS			1-HOUSE 1-APT		1-HOUSE 1-APT
GROSS FLOOR AREA [SF]		24,620	14,425	3,731 SF (Note 1)	= 18,156 SF
BUILDING FOOTPRINT [SF]		16,413	10,931	1,998 SF (Note 1)	= 12,929 SF
BUILDING COVERAGE [% of lot]		20%	13.32%	2.43%	= 15.75%
BUILDING HEIGHT [FT - Story]		30'-2 1/2	30'-2 1/2	30'-2 1/2	30'-2 1/2
FLOOR AREA RATIO (F.A.R.)		30%	17.6%	4.5%	= 22.1%
PARKING SPACES		24	28	4	= 32
LOADING SPACES		1	1		= 1
SITE COVERAGE [% of lot]		60%	38%	15.7%	= 53.7%

Note 1: Lot 35/48: Demo Exist. Greenhse/Trellis @ 4,428 SF + Greenhse Replacement (5,355 SF) Lot 36: Demo Deck/Shed @ 429 SF +Storage (1,500 SF).

**OFF-STREET PARKING AND LOADING CALCULATIONS**

*Provide the specific calculation used to determine the number of off-street parking and loading spaces required per the Zoning Ordinance.*

<b>PARKING CALCULATION (round up):</b> $1/200 \times 4,040 = 20 \text{ spaces} + 2 \text{ space for Apt} + 2 \text{ spaces for House} = 24 \text{ spaces}$
<b>LOADING CALCULATION (round up):</b> $1/4,000 \times 4,040 = 1 \text{ loading space}$

Jennifer & Pietro Cipriano Jr.	Copia Home and Garden	914 533-7242	<b>FOR APPLICANT:</b>	
<i>applicant's name</i>	<i>address</i>	<i>phone</i>	<i>signature</i>	
475 Smith Ridge Road, Vista NY 10590			DAVID W. COFFIN, AIA	
<i>owner's name</i>	<i>address</i>	<i>phone</i>	<i>signature</i>	<i>date</i>

Date of receipt by Planning Administrator: \_\_\_\_\_ Application ID: SDP# \_\_\_\_\_ or SP# \_\_\_\_\_

**TOWN OF LEWISBORO PLANNING BOARD**

Onatru Farm, Elmwood Road, South Salem, New York 10590 • TEL (914) 763-5592 / FAX (914) 763-3637

**ADDENDUM SITE DATA FORM**

application type (check one)

**SITE DEVELOPMENT PLAN**  
REVISED 4-3-2015

**SPECIAL PERMIT USE**

COPIA HOME AND GARDEN-AMEND SITE

(W) 198.76' (S) 445.6'

GENERAL BUSINESS (GB)

project name

475 SMITH RIDGE ROAD + 5 EAST STREET, VISTA, NY

street frontage (LF)

1.884 A

zoning district

53

9834

35/48+36

site location

site acreage  
(82,067 SF)

tax sheet

block

lot

ZONING BULK REGULATION		REQUIRED	EXISTING	PROPOSED	TOTAL
MINIMUM YARDS [LF]	FRONT	20' (W&S)	50.1' (W) 30.4'(S)	50.1' (W) 34' (S)	50.1' (W) 34' (S)
	SIDE	30' (E)	92.8' (E)	65' (E) STORAGE	65' (E) STORAGE
	REAR	30' (N)	19.6' to Shed (N)	30' (N)	30' (N)
MINIMUM LANDSCAPE BUFFERS [LF]	FRONT	15' (W&S)	15' (W&S)	15' (W&S)	15' (W&S)
	SIDE	30' (E)	30' (E)	30' (E)	30' (E)
	REAR	30' (N)	30' (N)	30' (N)	30' (N)
NUMBER OF DWELLING UNITS			1-HOUSE 1-APT		1-HOUSE 1-APT
GROSS FLOOR AREA [SF]		24,620	16,158	1,041 SF (Note 1)	= 17,199 SF
BUILDING FOOTPRINT [SF]		16,413	10,931	1,041 SF (Note 1)	= 11,972 SF
BUILDING COVERAGE [% of lot]		20%	13.32%	1.27%	= 14.59%
BUILDING HEIGHT [FT - Story]		30'-2 1/2	30'-2 1/2	30'-2 1/2	30'-2 1/2
FLOOR AREA RATIO (F.A.R.)		30%	19.7%	1.27%	= 20.97%
PARKING SPACES		24	28	4	= 32
LOADING SPACES		1	1		= 1
SITE COVERAGE [% of lot]		60%	38%	15.7%	= 53.7%

Note 1: Lot 35/48: Demo Greenhse/Trellis @ 4,428 SF + New Greenhse (4,914 SF) Lot 36: Demo Deck/Shed @ 945 SF + New Storage (1,500 SF).

**OFF-STREET PARKING AND LOADING CALCULATIONS**

Provide the specific calculation used to determine the number of off-street parking and loading spaces required per the Zoning Ordinance.

**PARKING CALCULATION (round up):**

1/200 x 4,040 = 20 spaces + 2 space for Apt + 2 spaces for House = 24 spaces

**LOADING CALCULATION (round up):**

1/4,000 x 4,040 = 1 loading space

Jennifer & Pietro Cipriano Jr. Copia Home and Garden

914 533-7242

applicant's name

address

phone

signature

date

475 Smith Ridge Road, Vista NY 10590

FOR APPLICANT: REVISED  
*David W. Coffin AIA* 4/03/15  
DAVID W. COFFIN AIA

owner's name

address

phone

signature

date

Date of receipt by Planning Administrator: \_\_\_\_\_

Application ID: SDP# \_\_\_\_\_ or SP# \_\_\_\_\_

617.20  
**Appendix B**  
**Short Environmental Assessment Form**

**Instructions for Completing**

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b>							
Name of Action or Project: Copia Home and Garden-Amend Site Plan							
Project Location (describe, and attach a location map): 475 Smith Ridge Road (Lots 35/48) and 5 East Street (Lot 36), Vista, NY 10590							
Brief Description of Proposed Action: Lots 35/48 & 36 have been rezoned to General Business (GB) and combined for Site Development Plan Approval in the Town of Lewisboro, NY. The existing curb-cut off East Street into the 475 Smith Ridge Road lots is relocated eastward approx. 200 feet from intersection of Route #123 and East Street. A continuous grass and plant strip between the East Street pavement edge and parking along the south property line is provided. The existing curb-cut into 5 East Street is widened from 18.5 feet to 25 feet. Additional parking is provided along the 475 Smith Ridge south property line parallel to East Street. Commercial truck traffic enters the 5 East Street widened curb-cut; u-turns within the property and exits from the relocated 475 Smith Ridge curb-cut onto East Street. Existing grades and storm drainage are maintained with slight adjustments for interior site truck circulation, new blacktop pavement/gravel roadways and curb-cut.							
Name of Applicant or Sponsor: Jennifer and Pietro Cipriano Jr.		Telephone: 914-533-7242					
		E-Mail: pplants@optonline.net					
Address: Copia Home and Garden, 475 Smith Ridge Road							
City/PO: Vista		State: NY	Zip Code: 10590				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">NO</th> <th style="width: 50%; text-align: center;">YES</th> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	NO	YES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO	YES						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Westchester County Planning Department			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">NO</th> <th style="width: 50%; text-align: center;">YES</th> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	NO	YES	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NO	YES						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
3.a. Total acreage of the site of the proposed action?		1.884 acres					
b. Total acreage to be physically disturbed		.413 acres					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		1.884 acres					
4. Check all land uses that occur on, adjoining and near the proposed action.							
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)							
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____							
<input checked="" type="checkbox"/> Parkland (Town of Lewisboro Park/Recreation)							



18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ _____	<b>NO</b>	<b>YES</b>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	<b>NO</b>	<b>YES</b>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	<b>NO</b>	<b>YES</b>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b>		
Applicant/sponsor name: _____ Date: _____		
Signature: _____		

**Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2.** Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing: a. public / private water supplies?	<input type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input type="checkbox"/>	<input type="checkbox"/>

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input type="checkbox"/>	<input type="checkbox"/>

**Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3.** For every question in Part 2 that was answered “moderate to large impact may occur”, or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.
_____	_____
Name of Lead Agency	Date
_____	_____
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
_____	_____
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

**PRINT**

## **STEP II: SITE DEVELOPMENT NARRATIVE FOR “COPIA HOME & GARDEN – AMEND SITE PLAN”**

### **INTRODUCTION:**

The Sketch Site Plan was reviewed at 3/17/15 Planning Board Meeting resulting from a 2/24/15 meeting with the Town Consulting Engineer, the Copia Home and Garden Owner and architect. The revised site plan quickly removes truck traffic off East Street; provides a better visual screen between East Street and the Copia work operations that enhances the residential character. Planning Board performed a Site walk on 3/22/15 and confirmed the new enter/exit truck circulation pattern is acceptable; the south parking spaces are to be relocated within the south property line established by the Town 1985 taking. The Planning Board advised Step II Site Development Plan Approval can be submitted at the next Planning Board Meeting on April 21, 2015.

### **STEP II APPLICATION SUBMISSION REQUIREMENTS:**

In addition to the submission requirements indicated on the Step II Application form, the following Planning Board requirements/approvals were determined per the Town Consulting Engineer’s February 12, 2015 Memorandum:

1. Town Stormwater Permit
2. Wetland Activity Permit as determined by the Planning Board.
  - a. The Town Wetland Consultant determined the proposed action is an Unlisted Action under the State Environment Quality Review Act (SEQRA). Town wetlands were delineated by the Town consultant and determined that the proposed action is within the 150 foot wetland buffer. There are no wetlands on the properties.
3. Referral to the Westchester County Planning Department as determined by the Planning Board.
4. Stormwater Pollution Prevention Plan (SWPPP)

### **COPIA HOME AND GARDEN PROPERTY, 475 SMITH RIDGE ROAD, LOTS 35/48:**

1. Town of Lewisboro Resolution, dated November 3, 2014, approved zoning as GB-General Business.
2. Lots 35 and 48 are proposed to be combined with Lot 36 as recommended by the Town Consulting Engineer.

### **5 EAST STREET PROPERTY, LOT 36:**

1. Town of Lewisboro Resolution, dated November 3, 2014, approved zoning as GB-General Business.
2. Lot 36 is proposed to be combined with Lots 35 and 48 as recommended by the Town Consulting Engineer.

### **COMBINED COPIA PROPERTY 475 SMITH RIDGE ROAD, LOTS 35/48 & 5 EAST ST. PROPERTY, LOT 36:**

1. Relocate existing curb cut off East Street to rear of existing Lots 35/48; this will be for exit only truck traffic. The new curb cut s approximately 200 feet from the intersection of Rt #123 and East Street. Customers will be permitted to enter and exit new curb cut to access new paved driveway leading to retail parking areas. A 25 foot wide curb cut with paved apron will be provided.
2. Existing Lot 36 curb cut will be widened to 25 feet and will be for entrance only truck traffic turning off East Street and to access the site for unloading/loading and then turn toward the exit only new curb cut onto East Street.

## **STEP II: SITE DEVELOPMENT NARRATIVE FOR "COPIA HOME & GARDEN – AMEND SITE PLAN"**

3. A new greenhouse is proposed where indicated on the drawing to replace the existing trellis and greenhouse, which suffered a partial collapse from snow and ice accumulations after the March 17<sup>th</sup> Planning Board Meeting.
4. The existing paved house driveway will be maintained and connected to gravel roadways (internal) for truck deliveries, pick-up, turning and backing-up on site. The combination of relocated curb cut, existing house curb cut and one way enter/exit circulation quickly directs trucks into the site minimizing conflicts with residential traffic. The largest tractor trailer traffic anticipated was used as the template for turning radiuses.
5. Customers will be permitted to enter and exit at new relocated East Street curb cut to access new paved driveway and customer parking areas. The existing gravel roadway within and along the South property line will be reconfigured within the property as a paved customer driveway.
6. The existing chain link fence along the South property line will be removed and a new 6 foot high PVC coated "HEXWEB" fence will be installed from the proposed new Greenhouse, next to the existing Mulch Bins toward the house. New rolling gates will be installed at both the entry and exit driveways where indicated on the drawing..
7. The existing 5 parking spaces at the South end of retail parking will be reconfigured within the South property line and expanded as indicated on the drawing.
8. A planted dividing strip will be installed along and between the South property line and edge of the East Street paving to screen operations within the property. The existing Mulch Bins will remain within the South property and provide screening in combination with a grass and plant area between the bins and East Street.
9. The property behind and next to the existing house will be used for plant storage; the front yard will be maintained as lawn free from plant storage and to prevent damage to an existing septic system.
10. The existing garage will be used for miscellaneous storage and firewood will be stored along the East side of the garage.
11. A new 6 foot high "HEXWEB" fence will be installed with a rolling gate adjacent to the front porch to provide a visual screen between front and rear of property. Shrubs will be planted adjacent to the gate as needed to further restrict the view from the street.
12. Lot 36 existing plantings and fence along the front (East Street) property line will remain as a visual barrier.
13. Lot 36 existing plantings along the East property line remain and will be extended to the rear North property line to provide a visual screen between the adjacent residential properties.
14. A "future" Storage Building is shown on the site plan; the existing garage will be demolished. The setbacks will be honored and required site coverages will not be exceeded.
15. The Site Zoning Analysis on the drawing accounts for the demolition of the existing greenhouses and trellis to be replaced by a new greenhouse on Lots 35/48; and the demolition of the existing shed and deck to permit the installation of the gravel roadway/parking spaces and future storage building on Lot 36.
16. Approximately 25,000 square feet of site will be disturbed and protected from adjacent undisturbed areas during the work.

**MEMORANDUM**

TO: Chairman Jerome Kerner, AIA and  
Members of Lewisboro Planning Board

CC: Lisa Pisera  
Judson Siebert, Esq.

FROM: Jan K. Johannessen, AICP  
Joseph M. Cermele, P.E., CF  
David J. Sessions, RLA, AICP  
Town Consulting Professionals

DATE: April 15, 2015

RE: Jennifer & Pietro Cipriano, Jr.  
Copia Garden Center  
475 Smith Ridge Road & 5 East Street  
Sheet 53, Block 9834, Lots 35 & 48

---

**Project Description**

The applicant owns a landscape nursery business known as Copia located at 475 Smith Ridge Road (Tax Lots 35 and 48) and an abutting residential lot (Tax Lot 36). In November of 2014, the Town Board amended the underlying zoning district so that all three (3) lots are now located in the GB Zoning District, where landscape nursery is a permitted use. Collectively, the three (3) lots consist of ±1.8 acres and the applicant is proposing to expand the landscape nursery business onto the existing residential parcel and is proposing, among other things, to modify the curb cut on East Street.

**SEORA**

The proposed action is an Unlisted Action under the State Environmental Quality Review Act (SEORA) and a coordinated review is not required. Prior to making a decision on this pending application, the Planning Board must issue a Determination of Significance.

### **Required Approvals**

1. Site Development Plan Approval, a Wetland Activity Permit and a Town Stormwater Permit are required from the Planning Board; a public hearing is required to be held on the Wetland Activity Permit.
2. The application should be referred to the ACARC for review and recommendation.
3. The application should be referred to the Westchester County Planning Department in accordance with Section 239-m of the General Municipal Law; the Planning Board Secretary will coordinate this referral.

### **Comments**

1. The quantity, specie type, and size of all proposed landscaping should be specified on the plan. The first 70 feet of frontage along East Street should be shown to be vegetated in some manner without effecting sight distance. We note that a license agreement for planting within the right-of-way will be required from the Town Board; this can be handled as a condition of approval.
2. In accordance with Section 220-55D(1) of the Zoning Code, the drive aisle associated with the parking spaces located along East Street shall be a minimum of 20 feet wide (16 feet proposed).
3. A concrete curb should be specified on the east side of the driveway apron which serves 5 East Street, with a curb radius to match the opposing curb.
4. While the plan appears to be zoning compliant, it is recommended that the applicant review the site plan with the Building Department and that the Building Inspector confirm zoning compliance in writing.
5. To improve plan clarity, it is recommended that separate plan sheets be provided for truck turning maneuvers and erosion controls/stormwater improvements.
6. As discussed, the applicant should make application for a Town Stormwater Permit and Wetland Activity Permit.
7. As discussed, a complete survey of the subject property should be provided.

8. As previously requested, the Town's 150-foot wetland buffer should be shown on the site plan; the area of disturbance proposed within the wetland buffer must be quantified.
9. As previously requested, construction details shall be provided for all proposed improvements including, but not limited to, an asphalt pavement section, a gravel driveway section, curbing, grass pavers, fence, gates, etc.
10. As previously identified, a detailed engineering review will be completed upon the Planning Board's acceptance of the proposed layout and receipt of the revised engineering plans and a Stormwater Pollution Prevention Plan (SWPPP).
11. As requested and on behalf of the Planning Board, the applicant should prepare and submit Part 2 of the Short EAF; Part 1 has been submitted and has been found to be complete. The applicant must sign the EAF where indicated.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**Plan Reviewed, prepared by David W. Coffin, Jr., Architect and dated (last revised) April 1, 2015:**

- Step 2: Site Development Plan Submission (Dr. No. 1 of 1)

**Documents Reviewed:**

- Survey, prepared by RKW Land Surveying and dated December 1, 2014
- Step II Site Development Narrative
- Short Environmental Assessment Form

JKJ/JMC/DJS/dc

**ARIAS /LEXUS COVER**

**9-04PB**

# Site Design Consultants

Civil Engineers • Land Planners

March 18, 2015

***Hand Delivered***

Ms. Lisa Pisera, Secretary  
Planning Board  
Cross River Shopping Center at Orchard Square  
Suite L – Lower Level  
20 North Salem Road  
Cross River, NY 10518

Re: Arias / Lex Holding Co., Ltd.

Dear Ms. Pisera:

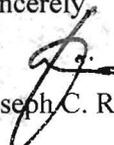
We have met the conditions of the February 25, 2014 Resolution granting Preliminary Subdivision Plat Approval Negative Declaration of Significance, as well as all comments contained in the Kellard Sessions review memo dated November 12, 2014.

Enclosed please find ten sets for submission each containing one of the following documents:

- "Engineer's Report Prepared for Guillermo Arias and Lex Holding Co., Ltd.," last revised October 31, 2014;
- NYS DOT letter of approval extension;
- Prints of the Surveyor's plat;
- Approved plan set titled "Proposed Subdivision Plan Prepared for Arias/Lex Holding Company, Ltd.," prepared by Site Design Consultants, Sheets 1-3 of 3, dated 11/18/2002, last revised 11/11/14 which has been approved by the Town of Lewisboro and the Westchester County Health Department;
- Landscape Plans prepared by DeLalla & Associates, Sheets SP-1, SP-2, and EX-1, last revised 11/17/2014;

The Deed descriptions are under review by the Town Attorney. We are submitting these documents for the deadline of March 24, 2015 for the April 21, 2015 Planning Board Meeting. Please contact us if you have any questions or need additional copies. Thank you.

Sincerely,

  
Joseph C. Riina, P.E.

Cc: G. Arias  
Lex Holding Co., Ltd.

JCR/cm/Enc./sdc 02-20

---

251-F Underhill Avenue • Yorktown Heights, New York 10598

60 Walnut Grove Road • Ridgefield, Connecticut 06877

(914) 962-4488

(203) 431-9504

Fax (914) 962-7386



## **Engineer's Report**

**Prepared for**

**Guillermo Arias  
411 Smith Ridge Road  
South Salem, NY 10590  
&  
Lexus Holding Co., LTD.  
Paul Guillaro, Pres.  
3102 Route 9  
Cold Spring, NY**

**Sheet 162 Block 9834 Lots 50**

**Prepared by**

**Site Design Consultants  
251-F Underhill Avenue  
Yorktown Heights, NY 10598**

**Dated:**

**October 29, 2014  
Revised October 31, 2014**



**Prepared for**

**Guillermo Arias  
411 Smith Ridge Road  
South Salem, NY 10590  
&  
Lexus Holding Co., LTD.  
Paul Guillaro, Pres.  
3102 Route 9  
Cold Spring, NY**

**Sheet 162 Block 9834 Lots 50**

**Prepared by**

**Site Design Consultants  
251-F Underhill Avenue  
Yorktown Heights, NY 10598  
914-962-4488**

**Joseph C. Riina, P.E.  
NYS Lic. No. 64431**

**Dated:**

**October 29, 2014  
Revised October 31, 2014**

**Table of Contents**

Section I	Engineer's Report
Section II	Sizing Calculations
Section III	Project Plans

**Section I**

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**Engineer's Report**

**Engineer's Report****Prepared for**

**Guillermo Arias  
411 Smith Ridge Road  
South Salem, NY 10590  
&  
Lexus Holding Co., LTD.  
Paul Guillaro, Pres.  
3102 Route 9  
Cold Spring, NY**

It is proposed by Arius / Lexus to process a two lot subdivision. The property is comprised of two tax lots totaling 17.71 acres, which were not formerly created under the Town and County subdivision requirements. It is now proposed to formerly subdivide the two lots. The property is currently zoned R-2A Single-Family Residential. The site currently is developed with an existing residence and several out buildings. The home and other buildings are positioned on the northwest corner of the property. The front portion of the proposed new lot where the development is to take place is primarily meadow. There is a light stand of trees along the road frontage. The front of the site is gently to moderately upwardly sloped to a high point where it then slopes downward to a hollow where there is a wetland which has both NYS DEC and Town jurisdiction. Beyond the wetland the property slopes up more steeply to a higher elevation. The proposal does not require any wetland permits. The new lot will be designed with a proposed well for domestic water supply and subsurface wastewater treatment system (OWTS). As stated it is proposed to create an approved new lot in accordance with the rules and regulations of the Town of Lewisboro and Westchester County department of Health.

The proposed subdivision will create two lots which will be in conformance with the zoning standards for the R-2A zone. Lot 1 which will contain the existing home and structures will have an area of 5.00 acres. There are no additional improvements proposed at this time for this lot. Lot 2 which is the new lot will have an area of 12.71 acres. It is proposed to construct a single family residence, sewage disposal system, well and stormwater management system on this lot. The new home is proposed to be placed on a highpoint. The OWTS will be in the front portion of the site between the house and the road. As stated this area is currently meadow. The stormwater management system and well will be to the rear of the house. The total disturbance for the proposed project is approximately 30,000 s.f. The property is located in the watershed of the Stamford Water Supply. Since the project disturbance is less than one acre, the filing of a Notice of Intent with the NYS DEC for compliance with General Permit 00-10-001 is not required. However, since there are more than 5,000 s.f. of disturbance the project needs to comply with the provisions of the Town of Lewisboro Code Chapter 189 Stormwater Management and Erosion and Sediment Control. This requires preparing a basic Stormwater Pollution Prevention Plan

and Sediment Control. This requires preparing a basic Stormwater Pollution Prevention Plan (SWPPP) and to address stormwater runoff increases at the discretion of the Town Engineer. The project has been discussed informally with the Town Engineer. Based on the proposed improvements and other considerations such as constraints it has been determined that in this case the roof runoff from a 25-year storm off the proposed residence will be captured and infiltrated. This will be done using Stormtech 740 Infiltrator units. The infiltration will not only provide for full recharge of the runoff volume it will also provide the best attainable water quality treatment. The runoff generated from the driveway will be conveyed through a minimally sloped low velocity vegetated swale which will provide attenuation as well as water quality treatment. Therefore, all of the proposed impervious areas will receive stormwater management for generated runoff. Since the surface treatment of the areas around the proposed residence will change from meadow to grass lawn there will be no significant increase in surface runoff.

Construction activities for the project will be managed so as to not transport any sediment or contaminants off-site toward Smith Ridge Road or adjoining properties. An Erosion and Sediment Control Plan has been prepared which gives guidance to the site contractor in maintaining stable site conditions during construction. This is done by installing erosion and sediment control practices such as silt fence, construction entrance stabilization, and soil stockpile management. In addition a general sequence is also provided so the contractor can implement sound construction procedures and practices. This is detailed in the construction drawings.

A stormwater analysis has been performed and a Stormwater Management System has been designed to provide for water quality treatment and the detention of stormwater. The basis of analysis was to capture, treat and retain the 25-year storm event with a runoff depth of 6.0" from the proposed residence. Based on this criteria the runoff which is to be captured and retained for an 2000 s.f. residence with a 400 s.f. patio and walks is:  $2,400 \times 6.0''/12 = 1200$  c.f. To manage this volume 13 infiltrator units are required. At the time that it is formally proposed to construct a residence these calculations would be modified according to the house that is actually proposed. The runoff from the driveway was calculated using the Graphical Peak Method for a Type III 25 year storm. The peak discharge was determined to be 0.42 cfs. The swale as proposed will accommodate this peak rate of discharge. The calculations are based on standard methodology contained within the NYS DEC SMDM. The practice chosen is not only designated in the Manual as a standard practice, but also a green infrastructure practice. Details of the infiltration system are provided within the construction drawings. The supporting calculations are contained within this report.

In conclusion, the stormwater management systems proposed provides adequate treatment of stormwater and attenuation of surface runoff to meet the Town Code requirements. Stormwater runoff generated from the project will be properly managed and will not have a negative impact on the Smith Ridge Road drainage system or adjoining properties.

Joseph C. Riina, P.E.  
NYS Lic. No. 64431

**Section II**

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**Sizing Calculations**



Units: **Imperial**

Project: **Arias - Lexus**

By: **Joseph C. Riina, P.E.**

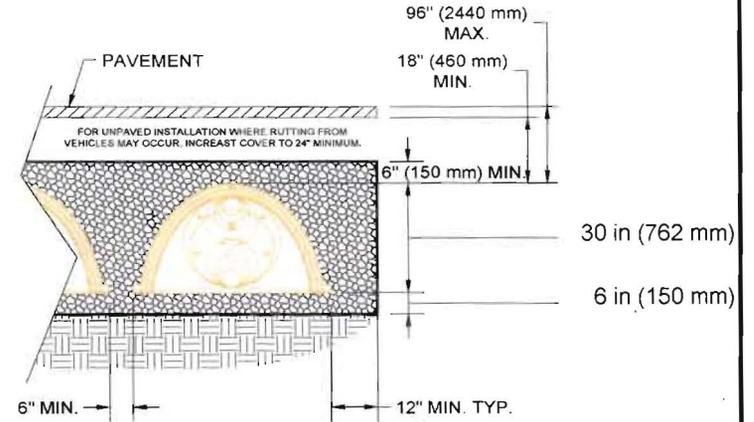
Point of Contact

Date:

**29-Oct-14**

**System Requirements**

Required Storage Volume	<b>1,200</b> CF
Select Stormtech Chamber System	<b>SC-740</b>
Stone Porosity (Industry Standard = 40%)	<b>40%</b>
Stone Foundation Depth	<b>6</b> Inches
Storage Volume Per Chamber	<b>74.90</b> CF
Avg Cover over Chambers (18 in min. & 96 in max.)	<b>12</b> Inches
<i>Check to ensure correct value and units are used for the cover</i>	
Number of Chambers Required	<b>17</b> Each
Required Bed Size	<b>702</b> SF
Tons of Stone Required	<b>87</b> Tons
Volume of Excavation	<b>104</b> CY
Area of Filter Fabric	<b>233</b> SY
# of End Caps Required	<b>8</b> Each
Length of ISOLATOR ROW	<b>35.6</b> FT
ISOLATOR FABRIC	<b>20</b> SY



Is the limiting dimension for the bed the width or length?

**length**

**Controlled by Width (Rows)**

**Controlled by Length**

Width	<b>50</b> FT
# of Chambers Long	- EA
# of Rows	- EA
Actual Length	- FT
Actual Width	- FT

Length	<b>45</b> FT
<i>You have switched between Imperial and Metric Units please check to ensure correct width is entered for the units shown above. Also check input data for cover over chambers and foundation depth.</i>	
# of Chambers Long	<b>5</b> EA
# of Rows	<b>4</b> EA
Actual Length	<b>39.20</b> FT
Actual Width	<b>20.50</b> FT

*3 of the chambers rows will contain only 4 chambers*

**Material Estimate**

**To use this sheet: Please enter data into the blue and green cells. If switching between Imperial and Metric units please check the correct units and data is input in the green cells.**

*Please call StormTech @ 888-892-2694 for conceptual cost estimates*

## Graphical Peak Discharge method

## Given Input Data:

Description ..... Arius/Lexus Subdivision Runoff From Proposed Driveway - 25 Year  
 Rainfall distribution ..... Type III  
 Frequency ..... 1 year  
 Rainfall, P (24-hours) ..... 6.0000 in  
 Drainage area ..... 0.0710 ac  
 Runoff curve number, CN ..... 98  
 Time of concentration, Tc ..... 6.0000 min  
 Pond and Swamp Areas ..... 0.0000 % of Area

## Computed Results:

Initial abstraction, Ia ..... 0.0408 in  
 Ia/P ..... 0.1000  
 Unit peak discharge, qu ..... 661.9421 csm/in  
 Runoff, Q ..... 5.7619 in  
 Pond and swamp adjustment, Fp ... 1.0000  
 Peak discharge, qp ..... 0.4231 cfs

## Channel Calculator

## Given Input Data:

Shape ..... Trapezoidal  
 Solving for ..... Flowrate  
 Slope ..... 0.0100 ft/ft  
 Manning's n ..... 0.0400  
 Depth ..... 0.5000 ft  
 Height ..... 0.5000 ft  
 Bottom width ..... 0.0000 ft  
 Left slope ..... 0.6670 ft/ft (V/H)  
 Right slope ..... 0.6670 ft/ft (V/H)

## Computed Results:

Flowrate ..... 0.4888 cfs  
 Velocity ..... 1.3041 fps  
 Full Flowrate ..... 0.4888 cfs  
 Flow area ..... 0.3748 ft<sup>2</sup>  
 Flow perimeter ..... 1.8022 ft  
 Hydraulic radius ..... 0.2080 ft  
 Top width ..... 1.4993 ft  
 Area ..... 0.3748 ft<sup>2</sup>  
 Perimeter ..... 1.8022 ft  
 Percent full ..... 100.0000 %

---

**Section III**

**Project Plans**



# Department of Transportation

ANDREW M. CUOMO  
Governor

JOAN McDONALD  
Commissioner

WILLIAM GORTON, P.E.  
Regional Director

February 02, 2015

Site Design

Mr. Joseph Riina, P.E.

251 F Underhill Avenue

Yorktown Heights, N.Y. 10598

Re: KPA# 486, Permit# 201308 37475

Rte # 123 SH# 1052

Lex Holding

In accordance with your request, we hereby amend Highway Work Permit # 201108 37475 which was issued on **10-17-2013** and **expires 7-31-2014**. The expiration date will now be

**10-01-2015.**

All other Rules, Regulations and Special Conditions of the original permit remain the same.

This amendment must be attached to the original permit and become part thereof.

If you have any questions please contact me at (914) 232-5065.

Very truly yours,

Stuart Sprague

NYSDOT

Permit Engineer

North Westchester

cc: 1) permit 2) SS

**State of New York  
Department of Transportation**

**Highway Work Permit**



**Permit No.:** 20130837475

**Date Issued:** 10/17/2013

**Project ID No.:** KPA#486

**Expiration Date:** 07/31/2014

**\*Permittee 1:**

LEX HOLDING COMPANY, LTD

P.O.BOX 170

GARRISON, NY 10524

Emergency Contact: PAUL GUILLARO

Emergency Number: 845-424-4400

Under the provisions of the Highway Law or Vehicle & Traffic Law, permission is hereby granted to the permittee to:

KPA3 486, CONSTRUCT ASPHALT RESIDENTIAL ACCESS. ALL WORK TO BE AS PER NYS DOT STANDARDS AND SPECIFICATIONS. ALL MATERIALS ARE TO BE APPROVED MATERIALS FROM AN APPROVED SUPPLIER. MPT PER THE FEDERAL MUTCD AND THE NY STATE SUPPLEMENT.

THE PERMITTEE IS RESPONSIBLE FOR TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE NYS SUPPLEMENT. ANYONE WORKING WITHIN THE HIGHWAY RIGHT-OF-WAY SHALL WEAR HIGH-VISIBILITY APPAREL MEETING THE ANSI 107-2004 CLASS II STANDARDS AND A HARD HAT.

County	Municipality	State Hwy	State Route	Beg Ref	End Ref
WESTCHESTER	LEWISBORO	1052	123	123 87011007	-

as set forth and represented in the attached application at the particular location or areas, or over the routes as stated therein, if required; and pursuant to the conditions and regulations general or special, and methods of performing work, if any; all of which are set forth in the application and form of this permit. See additional conditions on PAGE 2.

THIS PERMIT IS ISSUED BASED ON ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS BEING SATISFIED.

**Dated at:** Poughkeepsie **Date Signed:** 10/17/2013 **Commissioner of Transportation** **By:** Nick Choubah

**IMPORTANT:**

THIS PERMIT, WITH APPLICATION AND DRAWING (OR COPIES THEREOF) ATTACHED, SHALL BE PLACED IN THE HANDS OF THE CONTRACTOR BEFORE ANY WORK BEGINS. THE HIGHWAY WORK PERMIT SHALL BE AVAILABLE AT THE SITE DURING CONSTRUCTION.

**BEFORE WORK IS STARTED AND UPON ITS COMPLETION, THE PERMITTEE ABSOLUTELY MUST NOTIFY:**

Michael J McBride, PE, Resident Engineer 914-232-5065

**"UPON COMPLETION OF WORK", SECOND TO LAST PAGE, MUST BE COMPLETED, SIGNED BY THE PERMITTEE, AND DELIVERED TO THE RESIDENT ENGINEER.**

The issuing authority reserves the right to suspend or revoke this permit at its discretion without a hearing or the necessity of showing cause, either before or during the operations authorized.

The Permittee will cause an approved copy of the application to be and remain attached hereto until all work under the permit is satisfactorily completed, in accordance with the terms of the attached application. All damaged or disturbed areas resulting from work performed pursuant to this permit will be repaired to the satisfaction of the Department of Transportation.

**\* Upon completion of the work within the state highway right-of-way authorized by the work permit, the person, firm, corporation, municipality, or state department or agency, and his/her or its successors in interest, shall be responsible for the maintenance and repair of such work or portion of such work as set forth within the terms and conditions of the work permit.**

Permit Fee : \$15.00

Insurance Fee: \$25.00

Total Fees: \$40.00

Amt Rec'd 1: \$40.00      Check Num: 3782      Check Date: 20-MAY-13

App 1 Dep Ck #: 436941      App 1 Dep Amt: \$1,000.00      Dep Ck Dated: 09-AUG-13

UOF: App 1: No                      App 2: No

**Attachments and additional requirements to this Highway Work Permit include:**

PERM 33 - Highway Work Permit Application for Non\_Utility Work

PERM 41-1d - Method of Performing Work within the State Right of Way

PERM 50 - Inspection and/or Supervision Payment Agreement for Highway Work Permits

Other - Attach 1    MPT NOTES

Other - Attach 2    LANDSCAPE NOTES

**END OF ATTACHMENTS**

State of New York  
Department of Transportation

Highway Work Permit



Permit No.: 20130837475  
Date Issued: 10/17/2013  
Project ID No.: KPA#486  
Expiration Date: 07/31/2014

Return this page to:

Michael J McBride, PE, Resident Engineer  
85 Rt. 100  
Katonah, NY 10536

Permittee 1: LEX HOLDING COMPANY, LTD  
P.O. BOX 170  
GARRISON, NY 10524 -

UPON COMPLETION OF WORK AUTHORIZED, THIS PAGE OF THE PERMIT MUST BE COMPLETED, SIGNED BY THE PERMITTEE, AND DELIVERED TO THE RESIDENT ENGINEER.  
Work authorized by this permit has been completed. Refund of deposit or return/release of bond is requested.

DATE PERMITTEE AUTHORIZED AGENT (if any)

TO BE COMPLETED BY NYSDOT:

Work authorized by this permit has been satisfactorily completed and is accepted. Inspection Report must be completed.

- Refund of Deposit is authorized
- Return of Bond is authorized
- Unable to meet schedule as specified in bid proposal
- Amount charged against Bond may be released.
- Retain bond for future permits
- Forfeit of Guarantee Deposit is authorized
- Other

DATE RESIDENT ENGINEER

Mailing address of refund has been verified.  
If different, list new address:

The Regional Office will forward this form to the Main Office with the appropriate box checked.

- Permit closed
- Bond returned/released
- Refund of Guarantee Deposit on this permit is authorized
- Forfeit Guarantee Deposit to NYSDOT
- Other

DATE REGIONAL TRAFFIC ENGINEER

## INSPECTION REPORT

For each Highway Work Permit issued, inspections will be performed. The following report must be completed for each site visit, indicating the date, inspector, and hours spent on inspection. **If the total inspection time exceeds 1 hour, then a FIN 12 (PERMIT INSPECTION FOR DEPARTMENT SERVICES) is REQUIRED.**

### INSPECTION REPORT LOG

HOURS WORKED BY DATE									HOURS	
Inspector Name	Date Inspected								Regular	Overtime
	Regular									
	Overtime									
Inspector Name	Date Inspected								Regular	Overtime
	Regular									
	Overtime									
Inspector Name	Date Inspected								Regular	Overtime
	Regular									
	Overtime									

**Complete hours for each date inspected.**  
**Add regular hour numbers across rows, and then overtime hours across rows.**  
**Add hour columns down for total hours of permit inspection time.**

**COMMENTS/OBSERVATIONS:**

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**I HEREBY CERTIFY THAT THE INFORMATION CONTAINED ABOVE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.**

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

**MEMORANDUM**

TO: Chairman Jerome Kerner, AIA and  
Members of the Lewisboro Planning Board

CC: Lisa Pisera  
Judson Siebert, Esq.

FROM: Jan K. Johannessen, AICP   
Joseph M. Cermele, P.E., CFM   
Town Consulting Professionals

DATE: April 15, 2015

RE: Arias/Lexus Subdivision  
Smith Ridge Road (Route 123)  
Sheet 50, Block 9834, Lots 28 & 162

**Project Description**

The applicants, Guillermo Arias and Lexus Holding Company, LLC, are proposing a 2-lot subdivision on ±17.7 acres of land located on Smith Ridge Road (NYS Route 123) and within the R-2A Zoning District. The two (2) existing tax lots were created by deed and the applicants are now proposing to legalize the formation of the lots by obtaining subdivision approval from the Planning Board. Lot 1, owned by Guillermo Arias, is proposed to consist of ±5.001 acres of land and will contain an existing single-family residence, asphalt driveway, detached garage, barn, septic system and potable water well; a new septic system is also proposed on Lot 1. Lot 2, owned by Lexus Holding Company, LLC, is proposed to contain ±12.7 acres of land, a proposed single-family residence, paved driveway, septic system, potable water well and stormwater improvements. The applicant is also proposing the establishment of a 20-foot wide landscape buffer area along the existing street frontage of Smith Ridge Road.

On February 25, 2014, the Planning Board issued a Negative Declaration of Significance and granted Preliminary Subdivision Plat Approval, subject to conditions.

### **Required Approvals**

1. Preliminary Subdivision Plat Approval was granted by the Planning Board on February 25, 2014; Final Subdivision Plat Approval is required from the Planning Board.
2. Unless waived by the Planning Board, a public hearing is required to be held on the Final Subdivision Plat.
3. A Town Stormwater Permit is required from the Planning Board in accordance with Chapter 189, Stormwater Management and Erosion and Sediment Control, of the Town Code.
4. Realty Subdivision Approval and individual septic system approval (Lot 1) is required from the Westchester County Department of Health (WCDH).
5. The proposed driveway associated with Lot 2 requires approval from the New York State Department of Transportation (NYSDOT).

### **Planning and Engineering Comments**

With the exception of the following, the comments outlined in our November 12, 2014 memorandum and the conditions contained within the Planning Board's February 25, 2014 resolution have been satisfied.

1. The limits of the proposed deed restricted area on Lot 1 shall be clearly illustrated on the construction drawings and subdivision plat and all legal documents associated with the deed restriction shall be submitted for review; it is recommended that the deed restricted area be shaded or hatched on the plans.
2. The most current deeds associated with both lots shall be submitted.
3. An itemized construction cost estimate shall be prepared by a NYS Licensed Professional Engineer; separate estimates shall be provided for each lot.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

Chairman Jerome Kerner, AIA

April 15, 2015

Page 3 of 3

**Plans Reviewed, prepared by Site Design Consultants and dated (last revised)  
November 11, 2014:**

- Improvement Plan (1 of 3)
- NYSDOT M.P.T. Plan (2 of 3)
- Improvement Details (3 of 3)

**Plans Reviewed, prepared by DeLalla & Associates, LLC and dated (last revised)  
November 17, 2014:**

- Subdivision Construction Plan (SP-1)
- Erosion & Sedimentation Control Plan (SP-2)
- Existing Conditions/Wetland Plan (EX-1)

**Other Plans and Documents Reviewed:**

- “Final Subdivision Plat”, prepared by Bunney Associates and dated (last revised) December 5, 2014
- Letter from Site Design Consultants, dated March 18, 2015
- Engineer’s Report, prepared by Site Design Consultants and dated (last revised) October 31, 2014
- NYSDOT Highway Work Permit #201108 37475, amended February 2, 2015

JKJ/JMC/dc

T:\Lewisboro\Correspondence\LW2072JJ-LWPPB-AriasLexusSubd-Review-Memo-4-15-15.docx

**INSITE WIRELESS  
(HOMELAND TOWERS)  
@ VISTA FD**

**CAL# 3-09PB**

LAW OFFICES OF  
**SNYDER & SNYDER, LLP**

94 WHITE PLAINS ROAD  
TARRYTOWN, NEW YORK 10591  
(914) 333-0700  
FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS

e mail to [RGuadioso@snyderlaw.net](mailto:RGuadioso@snyderlaw.net)

NEW YORK OFFICE  
445 PARK AVENUE, 9TH FLOOR  
NEW YORK, NEW YORK 10022  
(212) 749-1448  
FAX (212) 932-2693

LESLIE J. SNYDER  
ROBERT D. GAUDIOSO

DAVID L. SNYDER  
(1956-2012)

NEW JERSEY OFFICE  
ONE GATEWAY CENTER, SUITE 2600  
NEWARK, NEW JERSEY 07102  
(973) 824-9772  
FAX (973) 824-9774

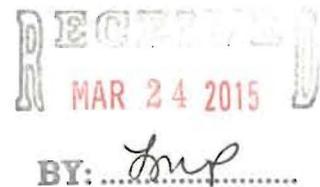
REPLY TO:

TARRYTOWN OFFICE

March 23, 2015

**By Hand Delivery**

Hon. Chairman Jerome Kerner  
and Members of the Planning Board  
Town of Lewisboro  
20 North Salem Road  
Cross River, NY 10518



RE: Special Permit Renewal Application  
InSite Wireless Group, LLC  
377 Smith Ridge Road, South Salem, NY

Honorable Chairman Kerner and  
Members of the Planning Board:

We represent InSite Wireless Group, LLC ("InSite") in connection with its special use permit renewal application for its existing tower ("Existing Tower") at the above reference property ("Property"). Pursuant to approval resolution granted by this Honorable Board on December 15, 2009, InSite respectfully requests renewal of its special permit. A copy of the Planning Board's December 15, 2009 approval resolution is enclosed for your convenience.

Condition 46 of the Approval Resolution states that the "Special Use Permit is valid for a period not to exceed five (5) years from the date of the filing of this Resolution with the Town Clerk, except as may be extended by the Planing Board pursuant to the review and approval of an application for renewal." The approval resolution limits the request to a "renewal" and does not require a new special permit.

In furtherance of the foregoing, enclosed please find a check in the amount of \$1,505.00 representing the special permit renewal fee, a check in the amount of \$3,500.00 representing the escrow fee and thirteen (13) copies of the following materials:

1. Application for Special Use Approval with Affidavit of Ownership;

2. Short EAF;
3. Antenna Site FCC RF Compliance Assessment and Report, prepared by Pinnacle Telecom Group, dated February 3, 2015;
4. Structural Analysis Report, prepared by Bennett & Pless, dated March 20, 2015;
5. Letter from All-Points Technology Corporation, Inc., dated January 27, 2011, with attachments demonstrating that the Existing Tower is in compliance with the Planning Board Approval Resolution;
6. Certificates of Occupancy;
7. Tax Affidavit; and
8. As Built Plans, prepared by APT Engineering, last revised February 16, 2015.

We thank you for your consideration, and look forward to discussing this matter with you at your next meeting. If you have any questions or require any additional documentation, please do not hesitate to contact me.

Respectfully submitted,  
SNYDER & SNYDER, LLP

By:   
Robert D. Gaudio, Esq.

Enclosures

RDG:jg

cc: InSite Wireless Group, LLC

Y:\WPDATA\ISS\RDG\Insite\ Vista FD- SP Renewal Letter.wpd



AFFIDAVIT OF OWNERSHIP

RECEIVED  
MAR 24 2015

STATE OF New York  
COUNTY OF WESTCHESTER

BY: [Signature]

Adam F. Ochs, being duly sworn, deposes and says that  
she/he resides at 69 Lockwood Rd. (FIREHOUSE: 377 Smith Ridge Rd.)  
in the County of: WESTCHESTER

State  
of: NEW YORK

And that she/he is (check one) (1) the owners, or (2) the CHAIRMAN  
Title  
of VISTA BOARD OF FIRE COMMISSIONERS DISTRICT #1  
name of corporation, partnership or other legal entity

which is the owner, in fee of all that certain lot, piece or parcel of land situated, lying  
and being in the Town of Lewisboro, New York, aforesaid and known and designated  
on the Tax Map in the Town of Lewisboro as Lot Number 094 and 088,084  
Block 9834 on sheet 50A

For (check one):

- SKETCH PLAN REVIEW     PRELIMINARY SUBDIVISION PLAT     FINAL SUBDIVISION PLAT
- SITE DEVELOPMENT PLAN     SPECIAL USE PERMIT     WAIVER OF SITE PLAN PROCEDURES
- WETLAND PERMIT     STORMWATER PERMIT     FILING WITH WESTCHESTER COUNTY CLERK

[Signature]  
Signed

Sworn to before me this  
12<sup>th</sup> day of February, 2015

Barbara Woodstead  
Notary public (affix stamp)

BARBARA WOODSTEAD  
Not. Public, State of New York  
No. 4787447  
Qualified in westchester county 17  
Commission Expires Sept. 30, 2017

**Short Environmental Assessment Form**  
**Part 1 - Project Information**

**RECEIVED**  
 MAR 24 2015

BY: *mt*

**Instructions for Completing**

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

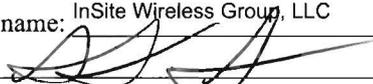
<b>Part 1 - Project and Sponsor Information</b>							
Name of Action or Project: Vista Fire Department							
Project Location (describe, and attach a location map): 377 Smith Ridge Road, South Salem, NY 10590							
Brief Description of Proposed Action: Special Use Permit renewal for a wireless telecommunications facility.							
Name of Applicant or Sponsor: InSite Wireless Group, LLC		Telephone: (914) 333-0700					
		E-Mail: RGaudio@snyderlaw.net					
Address: 1199 N. Fairfax Street, Suite 700							
City/PO: Alexandria		State: VA	Zip Code: 22314				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td align="center"><b>NO</b></td> <td align="center"><b>YES</b></td> </tr> <tr> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> </table>	<b>NO</b>	<b>YES</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>NO</b>	<b>YES</b>						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td align="center"><b>NO</b></td> <td align="center"><b>YES</b></td> </tr> <tr> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> </table>	<b>NO</b>	<b>YES</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>NO</b>	<b>YES</b>						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
3.a. Total acreage of the site of the proposed action?		approx. 5.95 acres					
b. Total acreage to be physically disturbed?		0 acres					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		approx. 5.95 acres					
4. Check all land uses that occur on, adjoining and near the proposed action.							
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)							
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Other (specify): <u>Wireless Telecommunications Facility</u>							
<input type="checkbox"/> Parkland							



18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ _____ _____	<b>NO</b>  <input checked="" type="checkbox"/>	<b>YES</b>  <input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____ _____	<b>NO</b>  <input checked="" type="checkbox"/>	<b>YES</b>  <input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____ _____	<b>NO</b>  <input checked="" type="checkbox"/>	<b>YES</b>  <input type="checkbox"/>

**I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor name: InSite Wireless Group, LLC Date: 3/23/2015

Signature: 

By: Robert D. Gaudio, Esq.  
 Snyder & Snyder, LLP, as attorney for Applicant





# PINNACLE TELECOM GROUP

*Professional and Technical Services*

RECEIVED  
MAR 24 2015  
BY: *jmp*

## ANTENNA SITE FCC RF COMPLIANCE ASSESSMENT AND REPORT

PREPARED FOR  
**INSITE WIRELESS**

**"NY001 - VISTA"**  
**377 SMITH RIDGE ROAD**  
**SOUTH SALEM, NY**

FEBRUARY 3, 2015

14 RIDGEDALE AVENUE - SUITE 209 • CEDAR KNOLLS, NJ 07927 • 973-451-1630

# CONTENTS

<b>INTRODUCTION AND SUMMARY</b>	<b>3</b>
<b>ANTENNA AND TRANSMISSION DATA</b>	<b>4</b>
<b>COMPLIANCE ANALYSIS</b>	<b>7</b>
<b>COMPLIANCE CONCLUSION</b>	<b>12</b>
<b>CERTIFICATION</b>	<b>13</b>

## **APPENDIX A. BACKGROUND ON THE FCC MPE LIMIT**

## INTRODUCTION AND SUMMARY

At the request of InSite Wireless, Pinnacle Telecom Group has performed an independent assessment of radiofrequency (RF) levels and related FCC compliance for wireless base station antenna operations on a monopole at 377 Smith Ridge Road in South Salem, NY. InSite Wireless refers to the site as “NY001 – Vista”, and has requested this report to provide a confirmation of FCC compliance for the wireless antenna operations at the site by Sprint, AT&T and Verizon Wireless.

The FCC requires wireless system operators to perform an assessment of potential human exposure to radiofrequency (RF) fields emanating from all the transmitting antennas at a site whenever antenna operations are added or modified, and to ensure compliance with the Maximum Permissible Exposure (MPE) limit in the FCC regulations.

This report describes a mathematical analysis of compliance with the FCC MPE limit for safe continuous exposure of the general public. The RF effects of the antennas are calculated using a standard FCC formula – and the analysis is designed to conservatively overstate the RF levels that actually occur from the antennas. In that way, as long as the results indicate RF levels below the MPE limit, we can have great confidence the compliance requirement is satisfied. The results of a compliance assessment can be explained in layman’s terms by describing the calculated RF levels as simple percentages of the FCC MPE limit. If the reference for that limit is 100 percent, then calculated RF levels higher than 100 percent indicate the MPE limit is exceeded, while calculated RF levels consistently lower than 100 percent serve as a clear and sufficient demonstration of compliance with the MPE limit. We will also describe the overall worst-case calculated result via the “plain-English” equivalent “times-below-the-limit factor”.

The results of the FCC RF compliance assessment in this case are as follows:

- The conservatively calculated maximum RF level from the combination of antenna operations at the site is 0.4453 percent (i.e., less than one-half of one percent) of the FCC MPE limit. In other words, even with the

significant degree of conservatism incorporated in the analysis, the worst-case calculated RF level is still more than 220 times below the FCC limit established as safe for continuous human exposure to the RF emissions from antennas.

- The results of the calculations provide a clear demonstration that the RF levels from the combination of antenna operations at the site satisfy the applicable criteria for controlling potential human exposure to RF fields, and the RF levels will be in clear compliance with the FCC regulations and limit concerning RF safety. Moreover, because of the conservative methodology and incorporated assumptions, RF levels actually caused by the antennas will be even less significant than the calculation results here indicate.

The remainder of this report provides the following:

- relevant technical data on the Sprint, AT&T and Verizon Wireless antenna operations at the site;
- a description of the applicable FCC mathematical model for assessing MPE compliance, and application of the relevant technical data to that model; and
- the results of the analysis, and the compliance conclusion for the site.

In addition, Appendix A provides background on the FCC MPE limit, along with a list of FCC references on compliance.

## ANTENNA AND TRANSMISSION DATA

The tables that follow provide the key compliance-related data for the Sprint, AT&T and Verizon Wireless antenna operations.

<b><i>Sprint Data</i></b>	
Transmitting Frequency Bands	860 MHz and 1900 MHz
Service Coverage Type	Sectorized
Antenna Type	Directional Panel

Antenna Model	RFS APXVSP18-C20
Antenna Centerline Height	148 ft.
Antenna Line Loss	Conservatively ignored (assumed 0 dB)
<b>860 MHz Antenna Data</b>	
Max. Antenna Gain	15.5 dBi
RF Channels per Sector	1
Transmitter Power / RF Channel	20 watts
<b>1900 MHz Antenna Data</b>	
Max. Antenna Gain	18.0 dBi
RF Channels per Sector	6
Transmitter Power / RF Channel	16 watts

<b>AT&amp;T Data</b>	
Transmitting Frequency Bands	700 MHz and 2100 MHz
Service Coverage Type	Sectorized
Antenna Type	Directional Panel
Antenna Model	Commscope DBXLH-8585A-R2M
Antenna Centerline Height	140 ft.
Antenna Line Loss	Conservatively ignored (assumed 0 dB)
<b>700 MHz Antenna Data</b>	
Max. Antenna Gain	12.6 dBi
RF Channels per Sector	2
Transmitter Power / RF Channel	40 watts
<b>2100 MHz Antenna Data</b>	
Max. Antenna Gain	16.6 dBi
RF Channels per Sector	2
Transmitter Power / RF Channel	40 watts

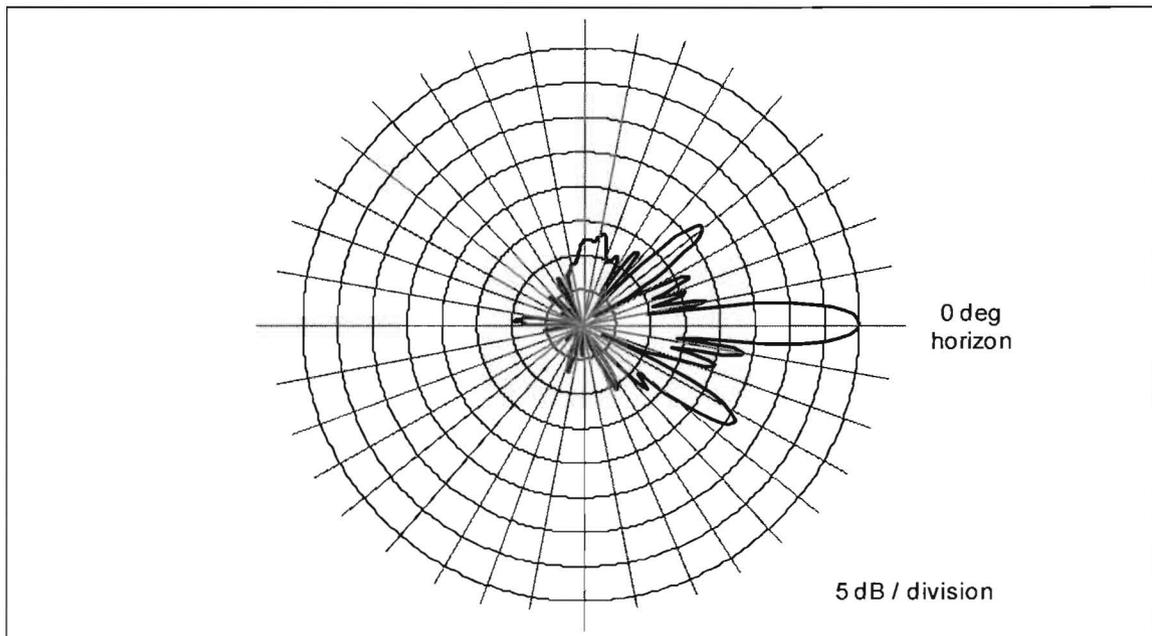
<b>Verizon Wireless Data</b>	
Transmitting Frequency Bands	700 MHz, 850 MHz, 1900 MHz and 2100 MHz
Service Coverage Type	Sectorized
Antenna Type	Directional Panel
Antenna Centerline Height	130 ft.
Antenna Line Loss	Conservatively ignored (assumed 0 dB)
<b>700 MHz Antenna Data</b>	
Antenna Model (Max. Gain)	Commscope DBXNH-6565-A2M (13.4 dBi) Commscope DBXNH-8585-A2M (12.6 dBi) Commscope SBNHH-1D65A (13.4 dBi)
RF Channels per Sector	1
Transmitter Power / RF Channel	40 watts

<b>850 MHz Antenna Data</b>	
Antenna Model (Max. Gain)	Commscope DBXNH-6565-A2M (14.6 dBi) Commscope DBXNH-8585-A2M (13.1 dBi) Commscope SBNHH-1D65A (13.6 dBi)
RF Channels per Sector	8
Transmitter Power / RF Channel	20 watts
<b>1900 MHz Antenna Data</b>	
Antenna Model (Max. Gain)	Commscope HBXX-6516DS-A2M (17.1 dBi) Commscope DBXNH-8585-A2M (15.9 dBi) Commscope SBNHH-1D65A (16.8 dBi)
RF Channels per Sector	4
Transmitter Power / RF Channel	16 watts
<b>2100 MHz Antenna Data</b>	
Antenna Model (Max. Gain)	Commscope HBXX-6516DS-A2M (17.6 dBi) Commscope DBXNH-8585-A2M (16.0 dBi) Commscope SBNHH-1D65A (16.7 dBi)
RF Channels per Sector	2
Transmitter Power / RF Channel	40 watts

The antenna vertical-plane radiation pattern is used in the calculations of RF levels at ground level around a site. By way of illustration, Figure 1 on the next page shows the vertical-plane pattern of one of the antenna models used here, which is typical for wireless antennas. Note that in this type of diagram, the antenna is effectively pointed at the three o'clock position (the horizon) and the relative strength of the pattern at different angles is described using decibel units.

The use of a decibel scale to describe the relative pattern at different angles incidentally tends to visually understate the actual focusing effects of the antenna. Where the antenna pattern reads 20 dB, for example, the relative RF energy emitted at the corresponding downward angle is 1/100<sup>th</sup> of the maximum that occurs in the main beam (at 0 degrees); at a 30 dB point, the level is 1/1,000<sup>th</sup> of the maximum. Note that the automatic pattern-scaling feature of our internal software may skew side-by-side visual comparisons of different antenna models, or even different parties' depictions of the same antenna model.

Figure 1. Commscope DBXLH-8585A-R2M – 2100 MHz Vertical-plane Pattern



## COMPLIANCE ANALYSIS

FCC Office of Engineering and Technology Bulletin 65 (“OET Bulletin 65”) provides guidelines for mathematical models to calculate the RF levels at various points around transmitting antennas.

At street-level around an antenna site (in what is called the “far field” of the antennas), the RF levels are directly proportional to the total antenna input power and the relative antenna gain in the downward direction of interest – and the levels are otherwise inversely proportional to the square of the straight-line distance to the antenna.

Conservative calculations also assume the potential RF exposure is enhanced by reflection of the RF energy from the intervening ground. Our calculations will assume a 100% “perfect”, mirror-like reflection, which is the absolute worst-case approach.

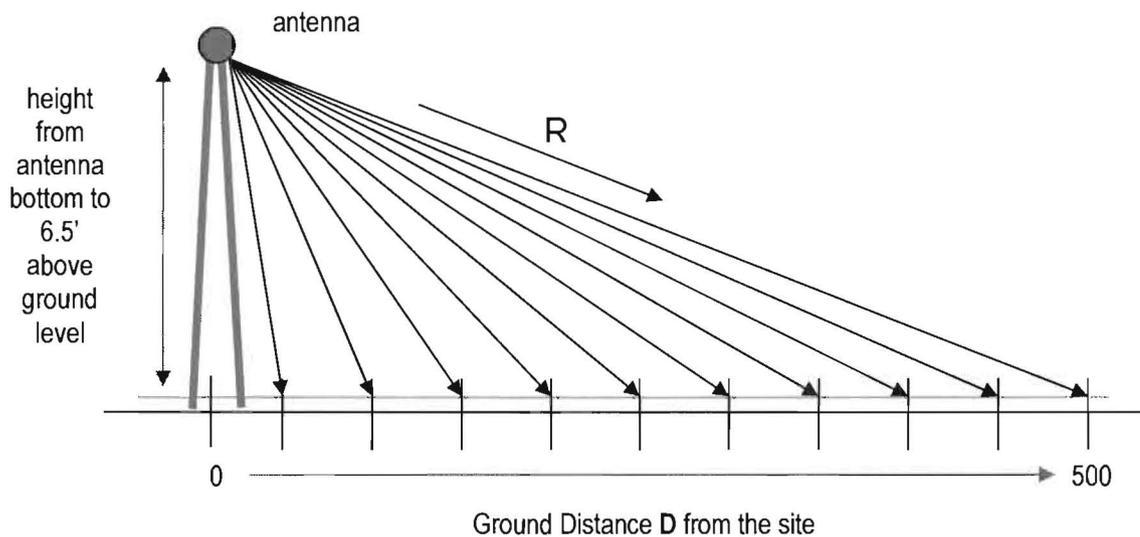
The formula for street-level RF compliance calculations for any given wireless antenna operation is as follows:

$$\text{MPE\%} = (100 * \text{TxPower} * 10^{(\text{Gmax-Vdisc}/10)} * 4) / (\text{MPE} * 4\pi * \text{R}^2)$$

where

MPE%	=	RF level, expressed as a percentage of the MPE limit applicable to continuous exposure of the general public
100	=	factor to convert the raw result to a percentage
TxPower	=	maximum net power into antenna sector, in milliwatts, a function of the number of channels per sector, the transmitter power per channel, and line loss
$10^{(\text{Gmax-Vdisc}/10)}$	=	numeric equivalent of the relative antenna gain in the downward direction of interest, referenced to any applied antenna mechanical downtilt; data on the antenna vertical-plane pattern is taken from manufacturer specifications
4	=	factor to account for a 100-percent-efficient energy reflection from the ground, and the squared relationship between RF field strength and power density ( $2^2 = 4$ )
MPE	=	FCC general population MPE limit
R	=	straight-line distance from the RF source to the point of interest, centimeters

The MPE% calculations are performed out to a distance of 500 feet from the facility to points 6.5 feet (approximately two meters, the FCC-recommended standing height) off the ground, as illustrated in Figure 2 on the next page.



**Figure 2. MPE% Calculation Geometry**

It is popularly understood that the farther away one is from an antenna, the lower the RF level – which is generally but not universally correct. The results of MPE% calculations fairly close to the site will reflect the variations in the vertical-plane antenna pattern as well as the variation in straight-line distance to the antennas. Therefore, RF levels may actually increase slightly with increasing distance within the range of zero to 500 feet from the site. As the distance approaches 500 feet and beyond, though, the antenna pattern factor becomes less significant, the RF levels become primarily distance-controlled, and as a result the RF levels generally decrease with increasing distance, and are well understood to be in compliance.

FCC compliance for a collocated antenna site is assessed in the following manner. At each distance point along the ground, an MPE% calculation is made for each antenna operation (including each frequency band), and the sum of the individual MPE% contributions at each point is compared to 100 percent, the normalized reference for compliance with the MPE limit. We refer to the sum of the individual MPE% contributions as “total MPE%”, and any calculated total

MPE% result exceeding 100 percent is, by definition, higher than the FCC limit and represents non-compliance and a need to mitigate the potential exposure. If all results are consistently below 100 percent, on the other hand, that set of results serves as a clear and sufficient demonstration of compliance with the MPE limit.

The following conservative methodology and assumptions are incorporated into the MPE% calculations on a general basis:

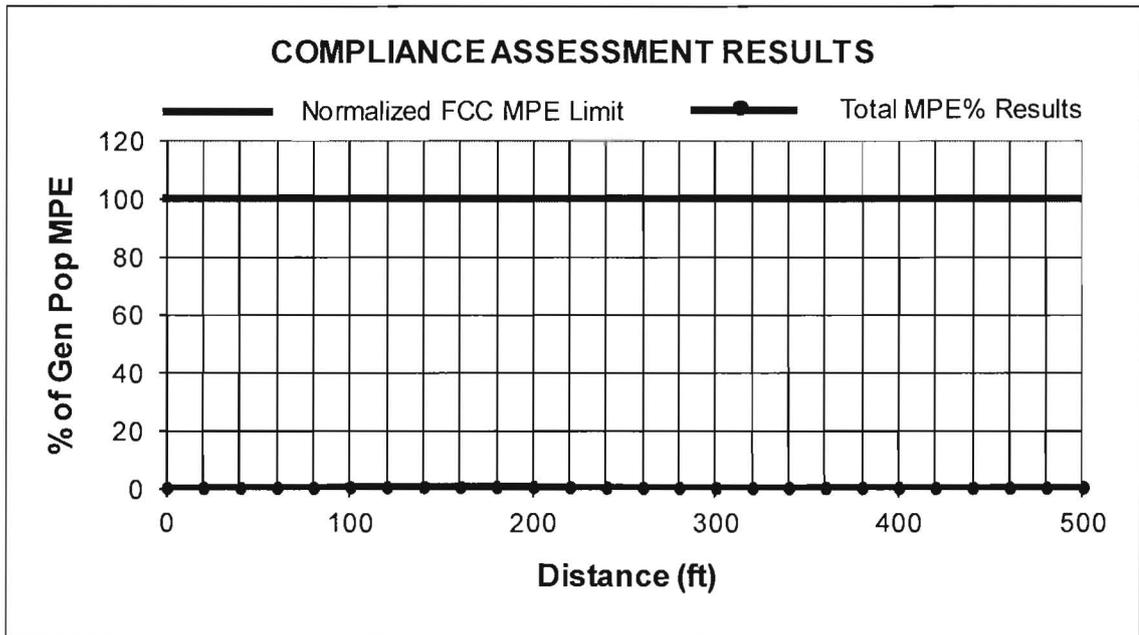
1. The antennas are assumed to be operating continuously at maximum power, and at maximum channel capacity. In addition, the effects of antenna line loss are ignored.
2. The power-attenuation effects of shadowing or other obstructions to the line-of-sight path from the antenna to the point of interest are ignored.
3. The calculations intentionally minimize the distance factor (R) by assuming a 6'6" human and performing the calculations from the bottom (rather than the centerline) of each parties' lowest mounted antenna, as applicable.
4. The potential RF exposure at ground level is assumed to be 100-percent enhanced (increased) via a "perfect" field reflection from the intervening ground.

The net result of these assumptions is to significantly overstate the calculated RF exposure levels relative to the levels that will actually occur – and the purpose of this conservatism is to allow very "safe-side" conclusions about compliance. Note that in this case the calculations for Verizon Wireless have taken into account the different characteristics and RF effects of the different antenna models used in each frequency band.

The table on the following page provides the results of the MPE% calculations for each operator, with the worst-case overall result highlighted in bold in the last column.

Ground Distance (ft)	Sprint 860 MHz MPE%	Sprint 1900 MHz MPE%	AT&T 700 MHz MPE%	AT&T 2100 MHz MPE%	Verizon 700 MHz MPE%	Verizon 850 MHz MPE%	Verizon 1900 MHz MPE%	Verizon 2100 MHz MPE%	Total MPE%
0	0.0007	0.0001	0.0031	0.0007	0.0004	0.0299	0.0092	0.0045	0.0486
20	0.0012	0.0008	0.0157	0.0007	0.0004	0.0381	0.0149	0.0007	0.0725
40	0.0009	0.0016	0.0178	0.0007	0.0004	0.0524	0.0582	0.0014	0.1334
60	0.0026	0.0011	0.0255	0.0014	0.0023	0.0011	0.0671	0.0028	0.1039
80	0.0018	0.0122	0.0362	0.0039	0.0006	0.0488	0.0060	0.0012	0.1107
100	0.0002	0.0005	0.0370	0.0010	0.0008	0.2078	0.0361	0.0108	0.2942
120	0.0034	0.0072	0.0256	0.0034	0.0039	0.2652	0.0610	0.0006	0.3703
140	0.0054	0.0044	0.0098	0.0067	0.0029	0.3113	0.0159	0.0267	0.3831
160	0.0032	0.0151	0.0006	0.0103	0.0203	0.2524	0.0177	0.0495	0.3691
180	0.0008	0.0221	0.0030	0.0538	0.0520	0.1692	0.0205	0.1112	0.4326
200	0.0018	0.0311	0.0109	0.0894	0.0409	0.1467	0.0056	0.1189	<b>0.4453</b>
220	0.0026	0.0165	0.0160	0.0582	0.0124	0.1391	0.0021	0.0500	0.2969
240	0.0022	0.0050	0.0139	0.0218	0.0013	0.1181	0.0087	0.0100	0.1810
260	0.0008	0.0127	0.0083	0.0024	0.0002	0.0968	0.0094	0.0067	0.1373
280	0.0000	0.0132	0.0049	0.0003	0.0005	0.0622	0.0096	0.0187	0.1094
300	0.0013	0.0021	0.0004	0.0009	0.0007	0.0414	0.0122	0.0226	0.0816
320	0.0027	0.0026	0.0002	0.0013	0.0022	0.0140	0.0305	0.0179	0.0714
340	0.0042	0.0079	0.0018	0.0021	0.0034	0.0075	0.0389	0.0104	0.0762
360	0.0057	0.0134	0.0057	0.0037	0.0042	0.0086	0.0416	0.0044	0.0873
380	0.0067	0.0142	0.0116	0.0057	0.0040	0.0178	0.0368	0.0013	0.0981
400	0.0071	0.0102	0.0199	0.0071	0.0029	0.0349	0.0257	0.0004	0.1082
420	0.0067	0.0050	0.0305	0.0069	0.0027	0.0319	0.0235	0.0003	0.1075
440	0.0056	0.0033	0.0424	0.0050	0.0012	0.0547	0.0121	0.0007	0.1250
460	0.0041	0.0062	0.0568	0.0023	0.0006	0.0837	0.0039	0.0027	0.1603
480	0.0038	0.0057	0.0525	0.0021	0.0006	0.0773	0.0036	0.0025	0.1481
500	0.0024	0.0095	0.0670	0.0011	0.0010	0.1093	0.0014	0.0065	0.1982

As indicated, even with the significant degree of conservatism built into the calculations, the maximum calculated RF level is 0.4453 percent of the FCC MPE limit – less than one-half of one percent, and obviously well below the 100-percent reference for compliance. A graph of the overall calculation results, provided below, probably provides a clearer *visual* illustration of the relative insignificance of the calculated RF levels. The line representing the calculated total MPE% results barely noticeably rises above the graph's zero baseline, and shows an obviously clear and consistent margin to the FCC MPE limit.



### Compliance Conclusion

According to the FCC, the MPE limit has been constructed in such a manner that continuous human exposure to RF emissions up to and including 100 percent of the MPE limit is acceptable and safe.

The analysis in this case shows that the maximum calculated RF level from the combination of antenna operations is 0.4453 percent of the FCC MPE limit. In other words, the worst-case calculated RF level from the combination of antenna operations is more than 220 times below the limit established as safe for continuous human exposure to the RF emissions from antennas.

The results of the calculations provide a clear demonstration of compliance with the FCC MPE limit. Moreover, because of the conservative calculation methodology and operational assumptions we applied in the analysis, RF levels actually caused by the antennas would be even less significant than the calculation results here indicate.

## CERTIFICATION

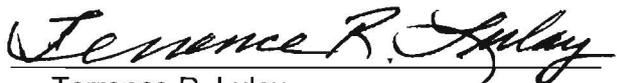
The undersigned certify as follows:

1. To the best of our knowledge, the statements and information disclosed in this report are true, complete and accurate.
2. The analysis of site RF compliance provided herein is consistent with the applicable FCC regulations, additional guidelines issued by the FCC, and industry practice.
3. The results of the analysis indicate that the subject antenna operations are in clear compliance with the FCC regulations concerning RF exposure.

  
\_\_\_\_\_  
Daniel J. Collins  
Chief Technical Officer

2/3/15

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Terrence R. Lulay  
Professional Engineer

2/3/15

\_\_\_\_\_  
Date



## Appendix A. Background on the FCC MPE Limit

### *FCC Rules and Regulations*

As directed by the Telecommunications Act of 1996, the FCC has established limits for maximum continuous human exposure to RF fields.

The FCC maximum permissible exposure (MPE) limits represent the consensus of federal agencies and independent experts responsible for RF safety matters. Those agencies include the National Council on Radiation Protection and Measurements (NCRP), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the American National Standards Institute (ANSI), the Environmental Protection Agency (EPA), and the Food and Drug Administration (FDA). In formulating its guidelines, the FCC also considered input from the public and technical community – notably the Institute of Electrical and Electronics Engineers (IEEE).

The FCC's RF exposure guidelines are incorporated in Section 1.301 *et seq* of its Rules and Regulations (47 CFR 1.1301-1.1310). Those guidelines specify MPE limits for both occupational and general population exposure.

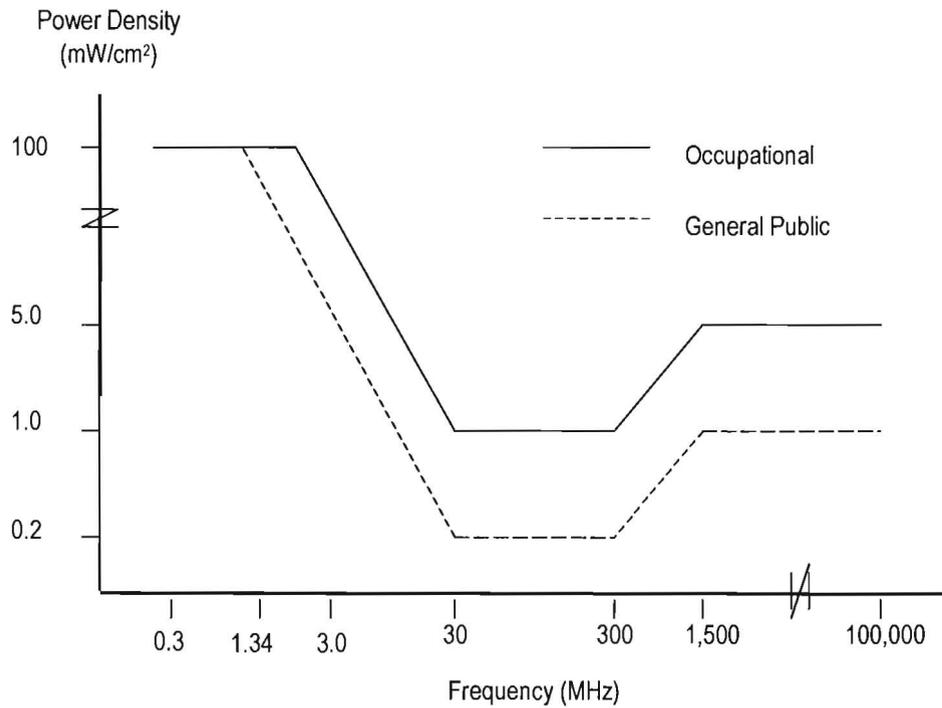
The specified continuous exposure MPE limits are based on known variation of human body susceptibility in different frequency ranges, and a Specific Absorption Rate (SAR) of 4 watts per kilogram, which is universally considered to accurately represent human capacity to dissipate incident RF energy (in the form of heat). The occupational MPE guidelines incorporate a safety factor of 10 or greater with respect to RF levels known to represent a health hazard, and an additional safety factor of five is applied to the MPE limits for general population exposure. Thus, the general population MPE limit has a built-in safety factor of more than 50. The limits were constructed to appropriately protect humans of both sexes and all ages and sizes and under all conditions – and continuous exposure at levels equal to or below the applicable MPE limits is considered to result in no adverse health effects or even health risk.

The reason for *two* tiers of MPE limits is based on an understanding and assumption that members of the general public are unlikely to have had appropriate RF safety training and may not be aware of the exposures they receive; occupational exposure in controlled environments, on the other hand, is assumed to involve individuals who have had such training, are aware of the exposures, and know how to maintain a safe personal work environment.

The FCC's RF exposure limits are expressed in two equivalent forms, using alternative units of field strength (expressed in volts per meter, or V/m), and power density (expressed in milliwatts per square centimeter, or mW/cm<sup>2</sup>). The table on the next page lists the FCC limits for both occupational and general population exposures, using the mW/cm<sup>2</sup> reference, for the different radio frequency ranges.

Frequency Range (F) (MHz)	Occupational Exposure (mW/cm <sup>2</sup> )	General Public Exposure (mW/cm <sup>2</sup> )
0.3 - 1.34	100	100
1.34 - 3.0	100	$180 / F^2$
3.0 - 30	$900 / F^2$	$180 / F^2$
30 - 300	1.0	0.2
300 - 1,500	$F / 300$	$F / 1500$
1,500 - 100,000	5.0	1.0

The diagram below provides a graphical illustration of both the FCC's occupational and general population MPE limits.



Because the FCC's MPE limits are frequency-shaped, the exact MPE limits applicable to the instant situation depend on the frequency range used by the systems of interest.

The most appropriate method of determining RF compliance is to calculate the RF power density attributable to a particular system and compare that to the MPE limit applicable to the operating frequency in question. The result is usually expressed as a percentage of the MPE limit.

For potential exposure from multiple systems, the respective percentages of the MPE limits are added, and the total percentage compared to 100 (percent of the limit). If the result is less than 100, the total exposure is in compliance; if it is more than 100, exposure mitigation measures are necessary to achieve compliance.

Note that the FCC "categorically excludes" all "non-building-mounted" wireless antenna operations whose mounting heights are more than 10 meters (32.8 feet) from the routine requirement to demonstrate compliance with the MPE limit, because such operations "are deemed, individually and cumulatively, to have no significant effect on the human environment". The categorical exclusion also applies to *all* point-to-point antenna operations, regardless of the type of structure they're mounted on. Note that the FCC considers any facility qualifying for the categorical exclusion to be automatically in compliance.

#### ***FCC References on Compliance***

47 CFR, FCC Rules and Regulations, Part 1 (Practice and Procedure), Section 1.1310 (Radiofrequency radiation exposure limits).

FCC Second Memorandum Opinion and Order and Notice of Proposed Rulemaking (FCC 97-303), *In the Matter of Procedures for Reviewing Requests for Relief From State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934 (WT Docket 97-192), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (ET Docket 93-62), and Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Amendment of the Commission's Rules to Preempt State and Local Regulation of Commercial Mobile Radio Service Transmitting Facilities*, released August 25, 1997.

FCC First Memorandum Opinion and Order, ET Docket 93-62, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, released December 24, 1996.

FCC Report and Order, ET Docket 93-62, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, released August 1, 1996.

FCC Office of Engineering and Technology (OET) Bulletin 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Edition 97-01, August 1997.

March 20, 2015

Tracy Lee  
 InSite Towers, LLC  
 1199 N Fairfax St.  
 Suite 700  
 Alexandria, VA 22314

RECEIVED  
 MAR 24 2015

BY: *imp*

Re: Structural Analysis Report  
 Structure: 150ft TransAmerican Monopole  
 Site Address: 377 Smith Ridge Road, South Salem, NY 10590 (Westchester Co)  
 Latitude: 41.2144°N, Longitude: 73.5151°W  
 Site Name: InSite – Vista  
 Site Number: InSite – NY001  
 SC Number: 150217  
 Status: **Tower Passes (90.3% Capacity)**

Dear Ms. Lee:

Per your request, Structural Components, LLC has completed a structural analysis for the above referenced project to verify the tower's compliance to the following design criteria:

Standard:	TIA/EIA-222-F <i>Structural Standards for Steel Antenna Towers and Antenna Supporting Structures</i>
Building Code:	2006 International Building Code 2010 Building Code of New York State
Design Basic Wind Speed without Ice:	80 mph (fastest mile)
Design Basic Wind Speed with Ice:	69 mph (fastest mile)
Ice Thickness:	½" radial
Serviceability Basic Wind Speed:	60 mph (fastest mile)

\*Allowable stress increase = 1.33

Please refer to the following structural analysis report, which gives complete details of the tower loading, results, information provided, and necessary assumptions.

We trust you find this report satisfactory. Please do not hesitate to contact us if you should have any questions or concerns.

Best Regards,  
 Bennett and Pless Engineering



Michael T. De Boer, PE  
 Sr. Technical Director, Telecom



03/20/2015

## 1 LOADING CONFIGURATION

The following antennas, mounts, transmission lines, and other appurtenances were considered for the structural analysis:

Elev. (ft) <sup>(1)</sup>	Appurtenance	Line	I/O <sup>(2)</sup>	Notes
150	(1) 12' Dipole Antenna (1) 4' Yagi Antenna	(2) 1/2"	I	Vista Fire Dept. Proposed
148.0	(3) Andrew HBX- 6516DS-VTM Panels (2) 1.5 ft Standard Dishes (1) Low Profile Platform	(5) 1-5/8"	I	Sprint Existing
140.0	(6) Andrew DBXLH-8585A-R2M Panels (3) Andrew SBNH-1D6565C Panels (3) Alcatel-Lucent RRH 700 (3) Alcatel-Lucent RRH AWS (6) Andrew ETM190G-12UB TMA's (6) Andrew ETD819HS-12UB TMA's (1) Raycap DC6-48-60-18-8F Surge Suppressor (6) Andrew CBC819 Diplexers (1) Low Profile Platform Mount	(18) 1-5/8" (2) Fiber (1) Power	I I I	AT&T Existing
130.0	(6) Antel LPA-80080/4CF Panels (3) Antel BXA-185090/8CF Panels (3) Antel BXA-70080/4CF Panels (6) Typical TMA's (1) Low Profile Mount	(18) 1-5/8"	I	Verizon Existing
70.0	(2) GPS Unit w/ Mount Pipe	(2) 1/2"	I	Verizon Existing

- 1) Elevations reference centerline of panel, yagi, and dish antennas, and base of whip antennas, in relation to the base of the tower.
- 2) "I/O" designates whether the lines are placed inside or outside of the pole. Contact Structural Components for further analysis if the lines cannot be placed as indicated.

## 2 RESULTS

The analysis was performed using tnxTower v6.1.3.1, a structural analysis program developed by Tower Numerics Inc. specifically for the communication tower industry.

### 2.1 TOWER MEMBER STRESS LEVELS

The tower has the following stress ratios in its structural members.

Elev. (ft)	Member	Stress Ratio
0 - 150	Monopole Shaft	90.3
0	Base Plate	72.5
0	Anchor Bolts	76.4

Stress ratio (SR) criteria:

SR ≤ 1.00 is completely within code limits.

SR ≤ 1.05 is considered within acceptable tolerance of code limits.

SR > 1.05 is outside acceptable tolerance of code limits and requires structural modifications.

## 2.2 FOUNDATION REACTIONS

The reactions listed below are for the design wind speed listed. Reactions are factored loads.

Reaction Type	No Ice Reactions	Iced Reactions	Foundation Status
Moment (Ft-Kips)	2207.14	1886.32	*Passes
Shear (Kips)	19.81	16.36	
Axial (kips)	27.44	33.16	

\* See Appendix A for foundation calculations

## 2.3 TOWER DEFLECTION

The deflections are listed below for critical tower elevations using the serviceability wind speed listed:

Elev. (ft.)	Displacement (inches)	Sway (deg)	Twist (deg)
148	61.84	3.51	0.0008
140	55.90	3.42	0.0007
130	48.61	3.30	0.0005

## 3 PROVIDED INFORMATION AND ASSUMPTIONS

Information about the tower was provided by InSite Towers, LLC. Structural Components, LLC did not visit the site.

Data	Document	Author	Date	File
Tower	Original Tower Design	DaVinci Engineering, Inc.	04/08/2010	10235-1037
Existing and Proposed Loads	Customer Application Structural Analysis Report	InSite Towers Structural Components LLC	12/09/14 07/21/2014	NY001 140427
Foundation	Original Tower Design	DaVinci Engineering, Inc.	04/08/2010	10235-1037
Soils	Geotechnical Report	TerraCon Consultants	02/02/2010	J2105105

The following assumptions were made in order to complete the analysis. These assumptions must be checked. If they do not accurately represent the existing or proposed tower, foundation, soil, and loading conditions, we must be notified so that we can make the appropriate changes to our analysis, conclusions, and recommendations.

1. The tower and foundation are constructed as shown in the provided drawings, previous structural analysis reports, mapping reports, photos, and/or other documents.
2. The tower and foundation are in good condition with no corrosion, damage or fatiguing issues which could reduce the carrying capacity of the tower.
3. The tower has been properly maintained in accordance with industry standards.
4. The tower and foundation have not been modified except as indicated in the provided information or in this report.

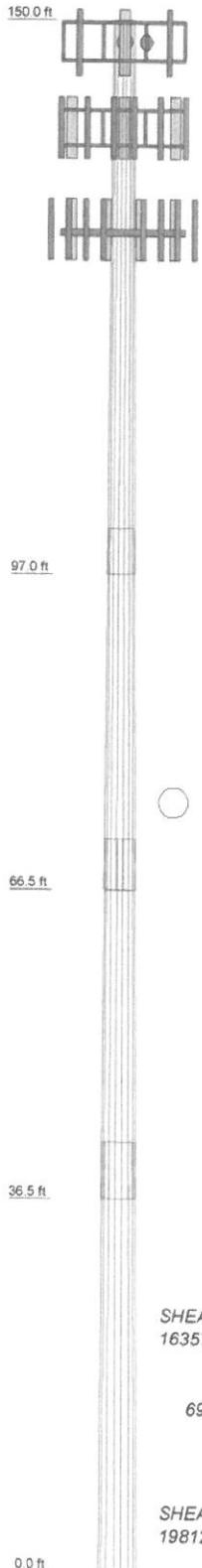
#### 4 CONCLUSIONS

To the best of our knowledge and belief the tower satisfies the requirements of the applicable codes and standards having jurisdiction over the work for the loadings and conditions as outlined in this report. **Structural modifications are not required at this time.**

Appendix A

Tower Profile and Calculations

Section	1	2	3	4
Length (ft)	53.00	35.00	35.00	42.00
Number of Sides	18	18	18	18
Thickness (in)	0.1875	0.2500	0.3125	0.3750
Socket Length (ft)	4.50	5.00	5.50	38.3393
Top Dia (in)	24.0000	30.7380	34.6378	44.4991
Bot Dia (in)	31.7730	35.8711	39.7710	69.819
Grade		A572-65		
Weight (lb)	2972.9	3123.8	4358.0	6981.9



**DESIGNED APPURTENANCE LOADING**

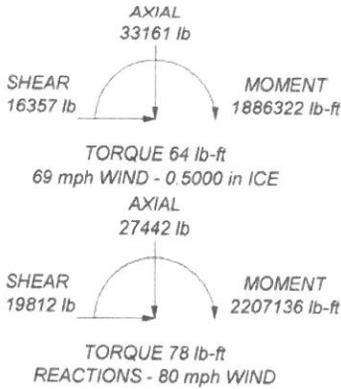
TYPE	ELEVATION	TYPE	ELEVATION
12' Dipole (Vista Fire Dept.)	150	(2) CBCT819 (ATI)	140
4' Yagi (Vista Fire Dept.)	150	(2) CBCT819 (ATI)	140
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	148	Low Profile Platform (ATI)	140
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	148	(2) DBXLH-8585A-R2M (ATI)	140
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	148	(2) DBXLH-8585A-R2M (ATI)	140
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	148	(2) DBXLH-8585A-R2M (ATI)	140
Low Profile Platform (Sprint)	148	SBNH-1D6565C (ATI)	140
18" Dish (Sprint)	148	SBNH-1D6565C (ATI)	140
18" Dish (Sprint)	148	SBNH-1D6565C (ATI)	140
RRH AWS (24.4x10.6x6.7" 43 lbs) (ATI)	140	(2) LPA-80080/4CF w/Mount Pipe (Verizon)	130
RRH AWS (24.4x10.6x6.7" 43 lbs) (ATI)	140	BXA-185090/BCF w/Mount Pipe (Verizon)	130
RRH AWS (24.4x10.6x6.7" 43 lbs) (ATI)	140	BXA-185090/BCF w/Mount Pipe (Verizon)	130
RRH AWS (24.4x10.6x6.7" 43 lbs) (ATI)	140	BXA-185090/BCF w/Mount Pipe (Verizon)	130
RRH 700 (12.2x10.8x2.1" 51 lbs) (ATI)	140	BXA-70080/4CF (Verizon)	130
RRH 700 (12.2x10.8x2.1" 51 lbs) (ATI)	140	BXA-70080/4CF (Verizon)	130
RRH 700 (12.2x10.8x2.1" 51 lbs) (ATI)	140	BXA-70080/4CF (Verizon)	130
(2) Andrew ETD819HS-12UB (ATI)	140	(2) TMA (Verizon)	130
(2) Andrew ETD819HS-12UB (ATI)	140	(2) TMA (Verizon)	130
(2) Andrew ETD819HS-12UB (ATI)	140	Low Profile Platform (Verizon)	130
(2) ETM190G-12UB (ATI)	140	(2) LPA-80080/4CF w/Mount Pipe (Verizon)	130
(2) ETM190G-12UB (ATI)	140	(2) LPA-80080/4CF w/Mount Pipe (Verizon)	130
(2) ETM190G-12UB (ATI)	140	(2) LPA-80080/4CF w/Mount Pipe (Verizon)	130
DC6-48-60-18-8F (ATI)	140	PCTEL GPS-TMG-HR-26N (Verizon)	70
(2) CBCT819 (ATI)	140	PCTEL GPS-TMG-HR-26N (Verizon)	70

**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

**TOWER DESIGN NOTES**

1. Tower is located in Westchester County, New York.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 60 mph wind.
5. TOWER RATING: 90.3%



**Bennett & Pless**  
 3395 Northeast Expressway, Suite 110  
 Atlanta, Georgia  
 Phone: 678-990-8700  
 FAX: 678-990-8701

Job: **150007 (Vista Fire Dept.)**  
 Project: **Vista (NY001)**  
 Client: **InSite Towers** Drawn by: **mdeboer** App'd:  
 Code: **TIA/EIA-222-F** Date: **03/20/15** Scale: **NTS**  
 Path: **C:\7263\pless\BSP\150007\_Vista\0001\_6A\_031815\_w\Colln-Reg.dwg** Dwg No: **E-1**

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 1 of 23
	<b>Project</b> Vista (NY001)	<b>Date</b> 15:58:28 03/20/15
	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

## Tower Input Data

There is a pole section.

This tower is designed using the TIA/EIA-222-F standard.

The following design criteria apply:

Tower is located in Westchester County, New York.

Basic wind speed of 80 mph.

Nominal ice thickness of 0.5000 in.

Ice density of 56 pcf.

A wind speed of 69 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.333.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

## Options

<ul style="list-style-type: none"> <li>Consider Moments - Legs</li> <li>Consider Moments - Horizontals</li> <li>Consider Moments - Diagonals</li> <li>Use Moment Magnification</li> <li>√ Use Code Stress Ratios</li> <li>√ Use Code Safety Factors - Guys</li> <li>Escalate Ice</li> <li>Always Use Max Kz</li> <li>Use Special Wind Profile</li> <li>Include Bolts In Member Capacity</li> <li>Leg Bolts Are At Top Of Section</li> <li>Secondary Horizontal Braces Leg</li> <li>Use Diamond Inner Bracing (4 Sided)</li> <li>Add IBC .6D+W Combination</li> </ul>	<ul style="list-style-type: none"> <li>Distribute Leg Loads As Uniform</li> <li>Assume Legs Pinned</li> <li>√ Assume Rigid Index Plate</li> <li>√ Use Clear Spans For Wind Area</li> <li>√ Use Clear Spans For KL/r</li> <li>Retension Guys To Initial Tension</li> <li>√ Bypass Mast Stability Checks</li> <li>√ Use Azimuth Dish Coefficients</li> <li>√ Project Wind Area of Appurt.</li> <li>Autocalc Torque Arm Areas</li> <li>SR Members Have Cut Ends</li> <li>Sort Capacity Reports By Component</li> <li>Triangulate Diamond Inner Bracing</li> <li>Use TIA-222-G Tension Splice Capacity Exemption</li> </ul>	<ul style="list-style-type: none"> <li>Treat Feedline Bundles As Cylinder</li> <li>Use ASCE 10 X-Brace Ly Rules</li> <li>Calculate Redundant Bracing Forces</li> <li>Ignore Redundant Members in FEA</li> <li>SR Leg Bolts Resist Compression</li> <li>All Leg Panels Have Same Allowable</li> <li>Offset Girt At Foundation</li> <li>Consider Feedline Torque</li> <li>Include Angle Block Shear Check</li> <li style="text-align: center;">Poles</li> <li>√ Include Shear-Torsion Interaction</li> <li>Always Use Sub-Critical Flow</li> <li>Use Top Mounted Sockets</li> </ul>
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## Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	150.00-97.00	53.00	4.50	18	24.0000	31.7730	0.1875	0.7500	A572-65 (65 ksi)
L2	97.00-66.50	35.00	5.00	18	30.7380	35.8711	0.2500	1.0000	A572-65 (65 ksi)
L3	66.50-36.50	35.00	5.50	18	34.6378	39.7710	0.3125	1.2500	A572-65 (65 ksi)
L4	36.50-0.00	42.00		18	38.3393	44.4991	0.3750	1.5000	A572-65 (65 ksi)

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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

### Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	I/Q in <sup>2</sup>	w in	w/t
L1	24.3702	14.1714	1015.2211	8.4534	12.1920	83.2694	2031.7780	7.0871	3.8940	20.768
	32.2631	18.7973	2369.2392	11.2129	16.1407	146.7868	4741.5959	9.4004	5.2620	28.064
L2	31.8824	24.1923	2841.0075	10.8232	15.6149	181.9419	5685.7533	12.0984	4.9699	19.88
	36.4245	28.2654	4531.1443	12.6455	18.2225	248.6560	9068.2509	14.1354	5.8733	23.493
L3	35.9168	34.0464	5068.0272	12.1855	17.5960	288.0212	10142.7230	17.0265	5.5463	17.748
	40.3845	39.1379	7698.6497	14.0078	20.2036	381.0525	15407.4294	19.5726	6.4497	20.639
L4	39.7498	45.1870	8228.1566	13.4773	19.4764	422.4686	16467.1401	22.5978	6.0877	16.234
	45.1855	52.5187	12918.1984	15.6640	22.6055	571.4621	25853.3950	26.2643	7.1718	19.125

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A <sub>f</sub>	Adjust. Factor A <sub>r</sub>	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontal
ft	ft <sup>2</sup>	in					in	in
L1 150.00-97.00				1	1	1		
L2 97.00-66.50				1	1	1		
L3 66.50-36.50				1	1	1		
L4 36.50-0.00				1	1	1		

### Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number	C <sub>A</sub> A <sub>A</sub>	Weight
						ft <sup>2</sup> /ft	plf
LDF4RN-50A (1/2 FOAM) (Vista Fire Dept.) *****	C	No	Inside Pole	150.00 - 5.00	2	No Ice 1/2" Ice	0.00 0.15
LDF7-50A (1-5/8 FOAM) (Sprint) *****	C	No	Inside Pole	148.00 - 5.00	5	No Ice 1/2" Ice	0.00 0.82
LDF7-50A (1-5/8 FOAM) (Verizon)	C	No	Inside Pole	130.00 - 5.00	12	No Ice 1/2" Ice	0.00 0.82
LDF7-50A (1-5/8 FOAM) (Verizon)	C	No	Inside Pole	130.00 - 5.00	3	No Ice 1/2" Ice	0.00 0.82
LDF7-50A (1-5/8 FOAM) (Verizon) *****	C	No	Inside Pole	130.00 - 5.00	3	No Ice 1/2" Ice	0.00 0.82
LDF5-50A (7/8 FOAM) (Verizon) ***	C	No	Inside Pole	70.00 - 5.00	2	No Ice 1/2" Ice	0.00 0.33
LDF7-50A (1-5/8 FOAM) (AT&T)	C	No	Inside Pole	140.00 - 5.00	18	No Ice 1/2" Ice	0.00 0.82
0.34" (Power) (AT&T)	C	No	Inside Pole	140.00 - 5.00	1	No Ice 1/2" Ice	0.00 0.05
Fiber Line (0.28") (AT&T)	C	No	Inside Pole	140.00 - 5.00	2	No Ice 1/2" Ice	0.00 0.03

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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C <sub>A</sub> A <sub>A</sub> ft <sup>2</sup> /ft	Weight plf
***								
LDF4RN-50A (1/2 FOAM) (Verizon)	C	No	Inside Pole	140.00 - 5.00	2	No Ice 1/2" Ice	0.00 0.00	0.15 0.15

### Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>	Weight lb
L1	150.00-97.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1364.56
L2	97.00-66.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1049.50
L3	66.50-36.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1049.82
L4	36.50-0.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1102.31

### Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>	Weight lb
L1	150.00-97.00	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1364.56
L2	97.00-66.50	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1049.50
L3	66.50-36.50	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1049.82
L4	36.50-0.00	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1102.31

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>A</sub> A <sub>A</sub> Front ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Side ft <sup>2</sup>	Weight lb
12' Dipole	C	None		0.0000	150.00	No Ice 2.80	2.80	26.00

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>A</sub> A <sub>1</sub> Front ft <sup>2</sup>	C <sub>A</sub> A <sub>1</sub> Side ft <sup>2</sup>	Weight lb
(Vista Fire Dept.) 4' Yagi	B	None		0.0000	150.00	1/2" Ice 4.22	4.22	47.61
(Vista Fire Dept.) *****						No Ice 2.00	2.00	50.00
						1/2" Ice 3.50	3.50	65.00
(2) DBXLH-8585A-R2M (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 5.63 1/2" Ice 6.03	3.29 3.65	31.00 65.68
(2) DBXLH-8585A-R2M (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 5.63 1/2" Ice 6.03	3.29 3.65	31.00 65.68
(2) DBXLH-8585A-R2M (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 5.63 1/2" Ice 6.03	3.29 3.65	31.00 65.68
SBNH-1D6565C (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 11.45 1/2" Ice 12.06	7.70 8.29	66.10 131.97
SBNH-1D6565C (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 11.45 1/2" Ice 12.06	7.70 8.29	66.10 131.97
SBNH-1D6565C (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 11.45 1/2" Ice 12.06	7.70 8.29	66.10 131.97
RRH AWS (24.4x10.6x6.7" 43 lbs) (AT&T)	A	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 2.51 1/2" Ice 2.75	1.59 1.80	43.00 60.37
RRH AWS (24.4x10.6x6.7" 43 lbs) (AT&T)	B	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 2.51 1/2" Ice 2.75	1.59 1.80	43.00 60.37
RRH AWS (24.4x10.6x6.7" 43 lbs) (AT&T)	C	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 2.51 1/2" Ice 2.75	1.59 1.80	43.00 60.37
RRH 700 (12.2x10.8x2.1" 51 lbs) (AT&T)	A	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 1.28 1/2" Ice 1.43	0.25 0.35	51.00 57.68
RRH 700 (12.2x10.8x2.1" 51 lbs) (AT&T)	B	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 1.28 1/2" Ice 1.43	0.25 0.35	51.00 57.68
RRH 700 (12.2x10.8x2.1" 51 lbs) (AT&T)	C	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 1.28 1/2" Ice 1.43	0.25 0.35	51.00 57.68
(2) Andrew ETD819HS-12UB (AT&T)	A	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 2.82 1/2" Ice 3.05	1.62 1.80	21.83 42.34
(2) Andrew ETD819HS-12UB (AT&T)	B	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 2.82 1/2" Ice 3.05	1.62 1.80	21.83 42.34
(2) Andrew ETD819HS-12UB (AT&T)	C	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 2.82 1/2" Ice 3.05	1.62 1.80	21.83 42.34
(2) ETM190G-12UB (AT&T)	A	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 1.06 1/2" Ice 1.21	0.45 0.57	16.00 22.53
(2) ETM190G-12UB (AT&T)	B	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 1.06 1/2" Ice 1.21	0.45 0.57	16.00 22.53
(2) ETM190G-12UB (AT&T)	C	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice 1.06 1/2" Ice 1.21	0.45 0.57	16.00 22.53

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	<b>Client</b>		InSite Towers		<b>Designed by</b>		mdeboer	

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
DC6-48-60-18-8F (AT&T)	C	None		0.00	0.0000	140.00	No Ice 1/2" Ice	2.22 2.22	42.00
(2) CBCT819 (AT&T)	A	From Leg	2.00 0.00 0.00		0.0000	140.00	No Ice 1/2" Ice	2.44 0.14 0.08 0.22	61.25 6.25 9.65
(2) CBCT819 (AT&T)	B	From Leg	2.00 0.00 0.00		0.0000	140.00	No Ice 1/2" Ice	0.14 0.08 0.13	6.25 9.65
(2) CBCT819 (AT&T)	C	From Leg	2.00 0.00 0.00		0.0000	140.00	No Ice 1/2" Ice	0.14 0.08 0.13	6.25 9.65
Low Profile Platform (AT&T)	C	None			0.0000	140.00	No Ice 1/2" Ice	18.00 24.00	1200.00 1500.00
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	A	From Leg	4.00 0.00 0.00		0.0000	148.00	No Ice 1/2" Ice	3.60 4.00 3.91	29.18 62.42
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	B	From Leg	4.00 0.00 0.00		0.0000	148.00	No Ice 1/2" Ice	3.60 4.00 3.91	29.18 62.42
HBX-6516DS-VTM w/ Mount Pipe (Sprint)	C	From Leg	4.00 0.00 0.00		0.0000	148.00	No Ice 1/2" Ice	3.60 4.00 3.91	29.18 62.42
Low Profile Platform (Sprint)	C	None			0.0000	148.00	No Ice 1/2" Ice	18.00 24.00	1200.00 1500.00
(2) LPA-80080/4CF w/Mount Pipe (Verizon)	A	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	6.31 6.89 15.56	53.20 137.62
(2) LPA-80080/4CF w/Mount Pipe (Verizon)	B	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	6.31 6.89 15.56	53.20 137.62
(2) LPA-80080/4CF w/Mount Pipe (Verizon)	C	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	6.31 6.89 15.56	53.20 137.62
BXA-185090/8CF w/Mount Pipe (Verizon)	A	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	3.72 4.34 4.57	35.55 71.64
BXA-185090/8CF w/Mount Pipe (Verizon)	B	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	3.72 4.34 4.57	35.55 71.64
BXA-185090/8CF w/Mount Pipe (Verizon)	C	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	3.72 4.34 4.57	35.55 71.64
BXA-70080/4CF (Verizon)	A	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	3.69 4.06 3.10	12.00 36.95
BXA-70080/4CF (Verizon)	B	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	3.69 4.06 3.10	12.00 36.95
BXA-70080/4CF (Verizon)	C	From Leg	4.00 0.00 0.00		0.0000	130.00	No Ice 1/2" Ice	3.69 4.06 3.10	12.00 36.95
(2) TMA (Verizon)	A	None			0.0000	130.00	No Ice 1/2" Ice	2.00 2.13	30.00 40.00
(2) TMA	B	None			0.0000	130.00	No Ice	2.00	30.00

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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>A</sub> A <sub>1</sub> Front ft <sup>2</sup>	C <sub>A</sub> A <sub>1</sub> Side ft <sup>2</sup>	Weight lb	
(Verizon)						1/2" Ice	2.13	0.64	40.00
(2) TMA (Verizon)	C	None		0.0000	130.00	No Ice	2.00	0.52	30.00
Low Profile Platform (Verizon)	C	None		0.0000	130.00	1/2" Ice	2.13	0.64	40.00
***						No Ice	18.00	18.00	1200.00
						1/2" Ice	24.00	24.00	1500.00
PCTEL GPS-TMG-HR-26N (Verizon)	B	From Leg	0.50	0.0000	70.00	No Ice	0.15	0.15	0.60
			0.00			1/2" Ice	0.20	0.20	2.25
			0.00						
PCTEL GPS-TMG-HR-26N (Verizon)	C	From Leg	0.50	0.0000	70.00	No Ice	0.15	0.15	0.60
			0.00			1/2" Ice	0.20	0.20	2.25
			0.00						

### Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft <sup>2</sup>	Weight lb	
18" Dish (Sprint)	A	Paraboloid w/Radome	From Leg	0.75	0.0000		148.00	1.50	No Ice 1/2" Ice	1.77 1.97	30.00 40.11
18" Dish (Sprint)	B	Paraboloid w/Radome	From Leg	0.75	0.0000		148.00	1.50	No Ice 1/2" Ice	1.77 1.97	30.00 40.11
				0.00							

### Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice
3	Dead+Wind 30 deg - No Ice
4	Dead+Wind 60 deg - No Ice
5	Dead+Wind 90 deg - No Ice
6	Dead+Wind 120 deg - No Ice
7	Dead+Wind 150 deg - No Ice
8	Dead+Wind 180 deg - No Ice
9	Dead+Wind 210 deg - No Ice
10	Dead+Wind 240 deg - No Ice
11	Dead+Wind 270 deg - No Ice
12	Dead+Wind 300 deg - No Ice
13	Dead+Wind 330 deg - No Ice
14	Dead+Ice+Temp
15	Dead+Wind 0 deg+Ice+Temp
16	Dead+Wind 30 deg+Ice+Temp
17	Dead+Wind 60 deg+Ice+Temp

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Comb. No.	Description
18	Dead+Wind 90 deg+Ice+Temp
19	Dead+Wind 120 deg+Ice+Temp
20	Dead+Wind 150 deg+Ice+Temp
21	Dead+Wind 180 deg+Ice+Temp
22	Dead+Wind 210 deg+Ice+Temp
23	Dead+Wind 240 deg+Ice+Temp
24	Dead+Wind 270 deg+Ice+Temp
25	Dead+Wind 300 deg+Ice+Temp
26	Dead+Wind 330 deg+Ice+Temp
27	Dead+Wind 0 deg - Service
28	Dead+Wind 30 deg - Service
29	Dead+Wind 60 deg - Service
30	Dead+Wind 90 deg - Service
31	Dead+Wind 120 deg - Service
32	Dead+Wind 150 deg - Service
33	Dead+Wind 180 deg - Service
34	Dead+Wind 210 deg - Service
35	Dead+Wind 240 deg - Service
36	Dead+Wind 270 deg - Service
37	Dead+Wind 300 deg - Service
38	Dead+Wind 330 deg - Service

### Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
L1	150 - 97	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	14	-12700.61	-61.21	35.34
			Max. Mx	11	-8173.32	462127.11	-368.44
			Max. My	2	-8172.34	367.55	462428.91
			Max. Vy	11	-14066.58	462127.11	-368.44
			Max. Vx	2	-14071.58	367.55	462428.91
			Max. Torque	7			83.64
L2	97 - 66.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	14	-17246.73	-61.21	35.34
			Max. Mx	11	-12359.56	914161.79	-624.96
			Max. My	2	-12358.87	634.11	914614.03
			Max. Vy	11	-16021.42	914161.79	-624.96
			Max. Vx	2	-16026.42	634.11	914614.03
			Max. Torque	7			83.39
L3	66.5 - 36.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	14	-23070.30	-61.21	30.90
			Max. Mx	11	-17839.75	1413598.30	-876.23
			Max. My	2	-17839.35	895.27	1414196.25
			Max. Vy	11	-17765.19	1413598.30	-876.23
			Max. Vx	2	-17770.13	895.27	1414196.25
			Max. Torque	7			78.20
L4	36.5 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	14	-33160.70	-61.21	30.90
			Max. Mx	11	-27426.04	2204989.43	-1224.19
			Max. My	2	-27426.03	1258.72	2205790.65
			Max. Vy	11	-19820.82	2204989.43	-1224.19
			Max. Vx	2	-19825.52	1258.72	2205790.65
			Max. Torque	7			78.02

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### Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Pole	Max. Vert	15	33160.70	7.03	16349.71
	Max. H <sub>x</sub>	11	27442.23	19798.40	-8.06
	Max. H <sub>y</sub>	2	27442.23	8.43	19803.09
	Max. M <sub>x</sub>	2	2205790.65	8.43	19803.09
	Max. M <sub>y</sub>	5	2201855.84	-19777.47	-11.72
	Max. Torsion	7	77.94	-9905.81	-17157.77
	Min. Vert	1	27442.23	0.00	0.00
	Min. H <sub>x</sub>	5	27442.23	-19777.47	-11.72
	Min. H <sub>y</sub>	8	27442.23	2.39	-19796.55
	Min. M <sub>x</sub>	8	-2204725.47	2.39	-19796.55
	Min. M <sub>y</sub>	11	-2204989.43	19798.40	-8.06
	Min. Torsion	13	-77.93	9906.16	17157.57

### Tower Mast Reaction Summary

Load Combination	Vertical lb	Shear <sub>x</sub> lb	Shear <sub>y</sub> lb	Overturning Moment, M <sub>x</sub> lb-ft	Overturning Moment, M <sub>y</sub> lb-ft	Torque lb-ft
Dead Only	27442.23	0.00	0.00	-25.25	-45.78	0.00
Dead+Wind 0 deg - No Ice	27442.23	-8.43	-19803.09	-2205790.65	1258.74	64.99
Dead+Wind 30 deg - No Ice	27442.23	9878.58	-17133.65	-1907757.62	-1099377.37	33.25
Dead+Wind 60 deg - No Ice	27442.23	17113.02	-9880.21	-1099613.72	-1904588.88	8.47
Dead+Wind 90 deg - No Ice	27442.23	19777.47	11.72	1791.86	-2201855.84	-18.57
Dead+Wind 120 deg - No Ice	27442.23	17145.77	9908.84	1103987.48	-1909642.87	-56.51
Dead+Wind 150 deg - No Ice	27442.23	9905.81	17157.77	1911423.94	-1103588.94	-77.94
Dead+Wind 180 deg - No Ice	27442.23	-2.39	19796.55	2204725.47	321.97	-62.80
Dead+Wind 210 deg - No Ice	27442.23	-9906.18	17141.88	1908966.99	1103554.14	-33.19
Dead+Wind 240 deg - No Ice	27442.23	-17146.76	9899.69	1102567.88	1909701.54	-8.48
Dead+Wind 270 deg - No Ice	27442.23	-19798.40	8.06	1224.19	2204989.43	18.51
Dead+Wind 300 deg - No Ice	27442.23	-17145.50	-9896.20	-1102082.32	1909508.57	54.32
Dead+Wind 330 deg - No Ice	27442.23	-9906.16	-17157.57	-1911446.17	1103546.15	77.93
Dead+Ice+Temp	33160.70	0.00	0.00	-30.90	-61.21	0.00
Dead+Wind 0 deg+Ice+Temp	33160.70	-7.03	-16349.71	-1885187.31	1042.59	54.44
Dead+Wind 30 deg+Ice+Temp	33160.70	8155.69	-14145.64	-1630484.78	-939625.57	28.84
Dead+Wind 60 deg+Ice+Temp	33160.70	14128.41	-8157.04	-939810.34	-1627807.34	8.79
Dead+Wind 90 deg+Ice+Temp	33160.70	16328.33	9.78	1509.77	-1881857.98	-13.62
Dead+Wind 120 deg+Ice+Temp	33160.70	14155.75	8180.95	943503.67	-1632103.04	-45.65
Dead+Wind 150 deg+Ice+Temp	33160.70	8178.42	14165.77	1633578.82	-943203.28	-64.28
Dead+Wind 180 deg+Ice+Temp	33160.70	-1.99	16344.25	1884259.47	247.35	-52.58
Dead+Wind 210 deg+Ice+Temp	33160.70	-8178.73	14152.51	1631491.38	943120.80	-28.78
Dead+Wind 240 deg+Ice+Temp	33160.70	-14156.58	8173.30	942298.28	1632100.42	-8.79
Dead+Wind 270 deg+Ice+Temp	33160.70	-16345.79	6.73	1027.88	1884469.16	13.56
Dead+Wind 300 deg+Ice+Temp	33160.70	-14155.53	-8170.40	-941908.55	1631936.25	43.80
Dead+Wind 330 deg+Ice+Temp	33160.70	-8178.71	-14165.60	-1633620.33	943115.03	64.28
Dead+Wind 0 deg - Service	27442.23	-4.74	-11139.24	-1242471.28	687.31	36.98
Dead+Wind 30 deg - Service	27442.23	5556.70	-9637.68	-1074590.92	-619265.57	18.93
Dead+Wind 60 deg - Service	27442.23	9626.07	-5557.62	-619386.49	-1072810.99	4.79
Dead+Wind 90 deg - Service	27442.23	11124.83	6.59	997.58	-1240256.53	-10.63
Dead+Wind 120 deg - Service	27442.23	9644.49	5573.72	621832.90	-1075669.43	-32.19
Dead+Wind 150 deg - Service	27442.23	5572.02	9651.25	1076641.18	-621643.75	-44.32
Dead+Wind 180 deg - Service	27442.23	-1.34	11135.56	1241844.99	159.46	-35.71
Dead+Wind 210 deg - Service	27442.23	-5572.23	9642.31	1075253.41	621578.28	-18.88
Dead+Wind 240 deg - Service	27442.23	-9645.05	5568.57	621032.51	1075657.74	-4.79
Dead+Wind 270 deg - Service	27442.23	-11136.60	4.54	677.71	1241984.46	10.58

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Load Combination	Vertical	Shear <sub>1</sub>	Shear <sub>2</sub>	Overturning Moment, M <sub>x</sub>	Overturning Moment, M <sub>z</sub>	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
Dead+Wind 300 deg - Service	27442.23	-9644.35	-5566.61	-620782.73	1075548.28	30.92
Dead+Wind 330 deg - Service	27442.23	-5572.22	-9651.13	-1076678.00	621575.66	44.32

### Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	
1	0.00	-27442.23	0.00	0.00	27442.23	0.00	0.000%
2	-8.43	-27442.23	-19803.09	8.43	27442.23	19803.09	0.000%
3	9878.58	-27442.23	-17133.65	-9878.58	27442.23	17133.65	0.000%
4	17113.02	-27442.23	-9880.21	-17113.02	27442.23	9880.21	0.000%
5	19777.47	-27442.23	11.72	-19777.47	27442.23	-11.72	0.000%
6	17145.77	-27442.23	9908.84	-17145.77	27442.23	-9908.84	0.000%
7	9905.81	-27442.23	17157.77	-9905.81	27442.23	-17157.77	0.000%
8	-2.39	-27442.23	19796.54	2.39	27442.23	-19796.55	0.000%
9	-9906.18	-27442.23	17141.88	9906.18	27442.23	-17141.88	0.000%
10	-17146.76	-27442.23	9899.69	17146.76	27442.23	-9899.69	0.000%
11	-19798.40	-27442.23	8.06	19798.40	27442.23	-8.06	0.000%
12	-17145.50	-27442.23	-9896.20	17145.50	27442.23	9896.20	0.000%
13	-9906.16	-27442.23	-17157.57	9906.16	27442.23	17157.57	0.000%
14	0.00	-33160.70	0.00	0.00	33160.70	0.00	0.000%
15	-7.03	-33160.70	-16349.71	7.03	33160.70	16349.71	0.000%
16	8155.69	-33160.70	-14145.64	-8155.69	33160.70	14145.64	0.000%
17	14128.41	-33160.70	-8157.04	-14128.41	33160.70	8157.04	0.000%
18	16328.32	-33160.70	9.78	-16328.33	33160.70	-9.78	0.000%
19	14155.75	-33160.70	8180.95	-14155.75	33160.70	-8180.95	0.000%
20	8178.42	-33160.70	14165.77	-8178.42	33160.70	-14165.77	0.000%
21	-1.99	-33160.70	16344.25	1.99	33160.70	-16344.25	0.000%
22	-8178.73	-33160.70	14152.51	8178.73	33160.70	-14152.51	0.000%
23	-14156.58	-33160.70	8173.30	14156.58	33160.70	-8173.30	0.000%
24	-16345.79	-33160.70	6.73	16345.79	33160.70	-6.73	0.000%
25	-14155.53	-33160.70	-8170.40	14155.53	33160.70	8170.40	0.000%
26	-8178.71	-33160.70	-14165.60	8178.71	33160.70	14165.60	0.000%
27	-4.74	-27442.23	-11139.24	4.74	27442.23	11139.24	0.000%
28	5556.70	-27442.23	-9637.68	-5556.70	27442.23	9637.68	0.000%
29	9626.07	-27442.23	-5557.62	-9626.07	27442.23	5557.62	0.000%
30	11124.83	-27442.23	6.59	-11124.83	27442.23	-6.59	0.000%
31	9644.49	-27442.23	5573.72	-9644.49	27442.23	-5573.72	0.000%
32	5572.02	-27442.23	9651.25	-5572.02	27442.23	-9651.25	0.000%
33	-1.34	-27442.23	11135.56	1.34	27442.23	-11135.56	0.000%
34	-5572.23	-27442.23	9642.31	5572.23	27442.23	-9642.31	0.000%
35	-9645.05	-27442.23	5568.57	9645.05	27442.23	-5568.57	0.000%
36	-11136.60	-27442.23	4.54	11136.60	27442.23	-4.54	0.000%
37	-9644.35	-27442.23	-5566.61	9644.35	27442.23	5566.61	0.000%
38	-5572.22	-27442.23	-9651.13	5572.22	27442.23	9651.13	0.000%

### Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	5	0.00000001	0.00001485

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3	Yes	6	0.00000001	0.00008855
4	Yes	6	0.00000001	0.00008836
5	Yes	5	0.00000001	0.00001499
6	Yes	6	0.00000001	0.00008872
7	Yes	6	0.00000001	0.00008906
8	Yes	5	0.00000001	0.00001523
9	Yes	6	0.00000001	0.00008872
10	Yes	6	0.00000001	0.00008877
11	Yes	5	0.00000001	0.00001480
12	Yes	6	0.00000001	0.00008884
13	Yes	6	0.00000001	0.00008872
14	Yes	4	0.00000001	0.00000001
15	Yes	6	0.00000001	0.00005514
16	Yes	7	0.00000001	0.00001583
17	Yes	7	0.00000001	0.00001580
18	Yes	6	0.00000001	0.00005510
19	Yes	7	0.00000001	0.00001588
20	Yes	7	0.00000001	0.00001592
21	Yes	6	0.00000001	0.00005513
22	Yes	7	0.00000001	0.00001587
23	Yes	7	0.00000001	0.00001587
24	Yes	6	0.00000001	0.00005513
25	Yes	7	0.00000001	0.00001588
26	Yes	7	0.00000001	0.00001588
27	Yes	5	0.00000001	0.00001226
28	Yes	6	0.00000001	0.00002791
29	Yes	6	0.00000001	0.00002781
30	Yes	5	0.00000001	0.00001216
31	Yes	6	0.00000001	0.00002801
32	Yes	6	0.00000001	0.00002817
33	Yes	5	0.00000001	0.00001232
34	Yes	6	0.00000001	0.00002800
35	Yes	6	0.00000001	0.00002802
36	Yes	5	0.00000001	0.00001217
37	Yes	6	0.00000001	0.00002806
38	Yes	6	0.00000001	0.00002802

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 97	63.330	32	3.5291	0.0008
L2	101.5 - 66.5	29.661	32	2.7965	0.0003
L3	71.5 - 36.5	14.575	32	1.9214	0.0001
L4	42 - 0	5.064	32	1.0910	0.0001

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	12' Dipole	32	63.330	3.5291	0.0008	18824
148.00	18" Dish	32	61.841	3.5081	0.0008	18824
140.00	(2) DBXLH-8585A-R2M	32	55.907	3.4223	0.0007	9411
130.00	(2) LPA-80080/4CF w/Mount Pipe	32	48.612	3.3038	0.0005	4704

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Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
70.00	PCTEL GPS-TMG-HR-26N	32	13.960	1.8763	0.0001	2064

### Maximum Tower Deflections - Design Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
L1	150 - 97	112.192	2	6.2578	0.0014
L2	101.5 - 66.5	52.588	7	4.9601	0.0005
L3	71.5 - 36.5	25.857	7	3.4091	0.0002
L4	42 - 0	8.987	7	1.9363	0.0001

### Critical Deflections and Radius of Curvature - Design Wind

Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
150.00	12' Dipole	2	112.192	6.2578	0.0014	10789
148.00	18" Dish	2	109.556	6.2206	0.0013	10789
140.00	(2) DBXLH-8585A-R2M	2	99.050	6.0687	0.0012	5393
130.00	(2) LPA-80080/4CF w/Mount Pipe	2	86.135	5.8588	0.0010	2694
70.00	PCTEL GPS-TMG-HR-26N	7	24.766	3.3291	0.0002	1170

### Compression Checks

### Pole Design Data

Section No.	Elevation	Size	L	L <sub>u</sub>	Kl/r	F <sub>a</sub>	A	Actual P	Allow. P <sub>a</sub>	Ratio P/P <sub>a</sub>
	ft		ft	ft		ksi	in <sup>2</sup>	lb	lb	
L1	150 - 147.447	TP31.773x24x0.1875	53.00	0.00	0.0	39.000	14.3942	-1952.27	561374.00	0.003
	147.447 - 144.895					39.000	14.6170	-2167.87	570063.00	0.004
	144.895 - 142.342					39.000	14.8398	-2389.17	578752.00	0.004
	142.342 - 139.789					39.000	15.0626	-5404.49	587441.00	0.009
	139.789 - 137.237					39.000	15.2854	-3828.71	596131.00	0.006
	137.237 - 134.684					39.000	15.5082	-4013.45	604820.00	0.007
	134.684 - 132.132					39.000	15.7310	-4201.23	613509.00	0.007
	132.132 - 129.579					39.000	15.9538	-5733.21	622198.00	0.009
	129.579 -					39.000	16.1766	-5931.24	630887.00	0.009

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Section No.	Elevation ft	Size	L ft	L <sub>a</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P lb	Allow. P <sub>a</sub> lb	Ratio P P <sub>a</sub>
	127.026									
	127.026 -					39.000	16.3994	-6134.09	639576.00	0.010
	124.474									
	124.474 -					39.000	16.6222	-6341.82	648265.00	0.010
	121.921									
	121.921 -					38.901	16.8450	-6554.35	655284.00	0.010
	119.368									
	119.368 -					38.677	17.0678	-6771.61	660135.00	0.010
	116.816									
	116.816 -					38.454	17.2906	-6993.52	664887.00	0.011
	114.263									
	114.263 -					38.230	17.5134	-7220.01	669539.00	0.011
	111.711									
	111.711 -					38.007	17.7362	-7451.04	674092.00	0.011
	109.158									
	109.158 -					37.783	17.9590	-7686.52	678545.00	0.011
	106.605									
	106.605 -					37.560	18.1818	-7926.42	682899.00	0.012
	104.053									
	104.053 - 101.5					37.336	18.4046	-8170.67	687152.00	0.012
	101.5 - 97					36.942	18.7973	-8392.46	694409.00	0.006
L2	101.5 - 97	TP35.8711x30.738x0.25	35.00	0.00	0.0	39.000	24.7159	-5058.14	963922.00	0.005
	97 - 95.5833					39.000	24.8808	-9135.15	970351.00	0.009
	95.5833 -					39.000	25.0457	-9314.29	976781.00	0.010
	94.1667									
	94.1667 - 92.75					39.000	25.2105	-9494.75	983211.00	0.010
	92.75 - 91.3333					39.000	25.3754	-9676.55	989640.00	0.010
	91.3333 -					39.000	25.5403	-9859.66	996070.00	0.010
	89.9167									
	89.9167 - 88.5					39.000	25.7051	-10044.10	1002500.00	0.010
	88.5 - 87.0833					39.000	25.8700	-10229.80	1008930.00	0.010
	87.0833 -					39.000	26.0349	-10416.90	1015360.00	0.010
	85.6667									
	85.6667 - 84.25					39.000	26.1997	-10605.20	1021790.00	0.010
	84.25 - 82.8333					39.000	26.3646	-10794.90	1028220.00	0.010
	82.8333 -					39.000	26.5294	-10985.80	1034650.00	0.011
	81.4167									
	81.4167 - 80					39.000	26.6943	-11178.00	1041080.00	0.011
	80 - 78.5833					39.000	26.8592	-11371.40	1047510.00	0.011
	78.5833 -					39.000	27.0240	-11566.20	1053940.00	0.011
	77.1667									
	77.1667 - 75.75					39.000	27.1889	-11762.20	1060370.00	0.011
	75.75 - 74.3333					39.000	27.3538	-11959.40	1066800.00	0.011
	74.3333 -					39.000	27.5186	-12157.90	1073230.00	0.011
	72.9167									
	72.9167 - 71.5					39.000	27.6835	-12357.70	1079660.00	0.011
	71.5 - 66.5					39.000	28.2654	-6141.46	1102350.00	0.006
L3	71.5 - 66.5	TP39.771x34.6378x0.3125	35.00	0.00	0.0	39.000	34.7738	-7460.37	1356180.00	0.006
	66.5 - 65.1389					39.000	34.9718	-13836.80	1363900.00	0.010
	65.1389 -					39.000	35.1698	-14062.60	1371620.00	0.010
	63.7778									
	63.7778 -					39.000	35.3678	-14289.70	1379340.00	0.010
	62.4167									
	62.4167 -					39.000	35.5658	-14517.90	1387070.00	0.010
	61.0556									
	61.0556 -					39.000	35.7638	-14747.40	1394790.00	0.011
	59.6944									
	59.6944 -					39.000	35.9618	-14978.10	1402510.00	0.011
	58.3333									
	58.3333 -					39.000	36.1598	-15210.00	1410230.00	0.011

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 13 of 23
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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Size	L ft	L <sub>w</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P lb	Allow. P <sub>a</sub> lb	Ratio $\frac{P}{P_a}$
	56.9722									
	56.9722 - 55.6111					39.000	36.3578	-15443.00	1417950.00	0.011
	55.6111 - 54.25					39.000	36.5558	-15677.30	1425680.00	0.011
	54.25 - 52.8889					39.000	36.7538	-15912.70	1433400.00	0.011
	52.8889 - 51.5278					39.000	36.9518	-16149.30	1441120.00	0.011
	51.5278 - 50.1667					39.000	37.1498	-16387.10	1448840.00	0.011
	50.1667 - 48.8056					39.000	37.3478	-16626.10	1456560.00	0.011
	48.8056 - 47.4444					39.000	37.5458	-16866.30	1464290.00	0.012
	47.4444 - 46.0833					39.000	37.7438	-17107.60	1472010.00	0.012
	46.0833 - 44.7222					39.000	37.9418	-17350.10	1479730.00	0.012
	44.7222 - 43.3611					39.000	38.1398	-17593.80	1487450.00	0.012
	43.3611 - 42					39.000	38.3378	-17838.60	1495170.00	0.012
L4	42 - 36.5	TP44.4991x38.3393x0.375	42.00	0.00	0.0	39.000	39.1379	-9058.75	1526380.00	0.006
	42 - 36.5					39.000	46.1471	-10572.90	1799740.00	0.006
	36.5 - 34.5789					39.000	46.4825	-20026.70	1812820.00	0.011
	34.5789 - 32.6579					39.000	46.8178	-20416.30	1825890.00	0.011
	32.6579 - 30.7368					39.000	47.1532	-20808.50	1838970.00	0.011
	30.7368 - 28.8158					39.000	47.4885	-21203.20	1852050.00	0.011
	28.8158 - 26.8947					39.000	47.8238	-21600.40	1865130.00	0.012
	26.8947 - 24.9737					39.000	48.1592	-22000.20	1878210.00	0.012
	24.9737 - 23.0526					39.000	48.4945	-22402.50	1891290.00	0.012
	23.0526 - 21.1316					39.000	48.8299	-22807.30	1904370.00	0.012
	21.1316 - 19.2105					39.000	49.1652	-23214.70	1917440.00	0.012
	19.2105 - 17.2895					39.000	49.5006	-23624.60	1930520.00	0.012
	17.2895 - 15.3684					39.000	49.8359	-24037.00	1943600.00	0.012
	15.3684 - 13.4474					39.000	50.1713	-24451.90	1956680.00	0.012
	13.4474 - 11.5263					39.000	50.5066	-24869.30	1969760.00	0.013
	11.5263 - 9.60526					39.000	50.8419	-25289.20	1982840.00	0.013
	9.60526 - 7.68421					39.000	51.1773	-25711.60	1995910.00	0.013
	7.68421 - 5.76316					39.000	51.5126	-26136.40	2008990.00	0.013
	5.76316 - 3.84211					39.000	51.8480	-26563.80	2022070.00	0.013
	3.84211 - 1.92105					39.000	52.1833	-26993.70	2035150.00	0.013
	1.92105 - 0					39.000	52.5187	-27426.00	2048230.00	0.013

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 14 of 23
	<b>Project</b> Vista (NY001)	<b>Date</b> 15:58:28 03/20/15
	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

### Pole Bending Design Data

Section No.	Elevation ft	Size	Actual	Actual	Allow.	Ratio	Actual	Actual	Allow.	Ratio	
			$M_x$ lb-ft	$f_{bx}$ ksi	$F_{bx}$ ksi	$\frac{f_{bx}}{F_{bx}}$	$M_y$ lb-ft	$f_{by}$ ksi	$F_{by}$ ksi	$\frac{f_{by}}{F_{by}}$	
L1	150 - 147.447	TP31.773x24x0.1875	1642.43	0.229	39.000	0.006	0.00	0.000	39.000	0.000	
	147.447 - 144.895		6334.75	0.858	39.000	0.022	0.00	0.000	39.000	0.000	
	144.895 - 142.342		11388.5	1.496	39.000	0.038	0.00	0.000	39.000	0.000	
	142.342 - 139.789		8	17627.5	2.248	39.000	0.058	0.00	0.000	39.000	0.000
	139.789 - 137.237		8	35954.1	4.451	39.000	0.114	0.00	0.000	39.000	0.000
	137.237 - 134.684		7	53998.8	6.494	39.000	0.167	0.00	0.000	39.000	0.000
	134.684 - 132.132		3	72471.4	8.469	39.000	0.217	0.00	0.000	39.000	0.000
	132.132 - 129.579		2	93380.0	10.609	39.000	0.272	0.00	0.000	39.000	0.000
	129.579 - 127.026		0	124833.	13.793	39.000	0.354	0.00	0.000	39.000	0.000
	127.026 - 124.474		33	156715.	16.847	39.000	0.432	0.00	0.000	39.000	0.000
	124.474 - 121.921		83	189026.	19.777	39.000	0.507	0.00	0.000	39.000	0.000
	121.921 - 119.368		67	221764.	22.591	38.901	0.581	0.00	0.000	38.901	0.000
	119.368 - 116.816		17	254929.	25.294	38.677	0.654	0.00	0.000	38.677	0.000
	116.816 - 114.263		17	288520.	27.891	38.454	0.725	0.00	0.000	38.454	0.000
	114.263 - 111.711		00	322535.	30.389	38.230	0.795	0.00	0.000	38.230	0.000
	111.711 - 109.158		83	356976.	32.791	38.007	0.863	0.00	0.000	38.007	0.000
	109.158 - 106.605		67	391840.	35.104	37.783	0.929	0.00	0.000	37.783	0.000
	106.605 - 104.053		00	427125.	37.330	37.560	0.994	0.00	0.000	37.560	0.000
	104.053 - 101.5		83	462832.	39.474	37.336	1.057	0.00	0.000	37.336	0.000
	101.5 - 97		50	231357.	18.914	36.942	0.512	0.00	0.000	36.942	0.000
	L2		101.5 - 97	TP35.8711x30.738x0.25	295564.	18.673	39.000	0.479	0.00	0.000	39.000
97 - 95.5833		17	547407.		34.126	39.000	0.875	0.00	0.000	39.000	0.000
95.5833 - 94.1667		50	568024.		34.945	39.000	0.896	0.00	0.000	39.000	0.000
94.1667 - 92.75		17	588770.		35.747	39.000	0.917	0.00	0.000	39.000	0.000
92.75 - 91.3333		83	609648.		36.533	39.000	0.937	0.00	0.000	39.000	0.000
91.3333 - 89.9167		33	630655.		37.304	39.000	0.957	0.00	0.000	39.000	0.000
89.9167 - 88.5		00	651790.		38.059	39.000	0.976	0.00	0.000	39.000	0.000
88.5 - 87.0833		83	673055.		38.800	39.000	0.995	0.00	0.000	39.000	0.000
87.0833 -		83	694448.		39.526	39.000	1.013	0.00	0.000	39.000	0.000

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 15 of 23
	<b>Project</b> Vista (NY001)	<b>Date</b> 15:58:28 03/20/15
	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Size	Actual $M_x$ lb-ft	Actual $f_{bx}$ ksi	Allow. $F_{bx}$ ksi	Ratio $\frac{f_{bx}}{F_{bx}}$	Actual $M_y$ lb-ft	Actual $f_{by}$ ksi	Allow. $F_{by}$ ksi	Ratio $\frac{f_{by}}{F_{by}}$
	85.6667		33							
	85.6667 - 84.25		715968.33	40.237	39.000	1.032	0.00	0.000	39.000	0.000
	84.25 - 82.8333		737615.83	40.935	39.000	1.050	0.00	0.000	39.000	0.000
	82.8333 - 81.4167		759389.17	41.620	39.000	1.067	0.00	0.000	39.000	0.000
	81.4167 - 80		781289.17	42.291	39.000	1.084	0.00	0.000	39.000	0.000
	80 - 78.5833		803314.17	42.949	39.000	1.101	0.00	0.000	39.000	0.000
	78.5833 - 77.1667		825463.33	43.594	39.000	1.118	0.00	0.000	39.000	0.000
	77.1667 - 75.75		847741.67	44.227	39.000	1.134	0.00	0.000	39.000	0.000
	75.75 - 74.3333		870133.33	44.848	39.000	1.150	0.00	0.000	39.000	0.000
	74.3333 - 72.9167		892658.33	45.457	39.000	1.166	0.00	0.000	39.000	0.000
	72.9167 - 71.5		915300.00	46.055	39.000	1.181	0.00	0.000	39.000	0.000
	71.5 - 66.5		454820.83	21.949	39.000	0.563	0.00	0.000	39.000	0.000
L3	71.5 - 66.5	TP39.771x34.6378x0.3125	541580.83	21.626	39.000	0.555	0.00	0.000	39.000	0.000
	66.5 - 65.1389		1018791.67	40.220	39.000	1.031	0.00	0.000	39.000	0.000
	65.1389 - 63.7778		1041283.33	40.645	39.000	1.042	0.00	0.000	39.000	0.000
	63.7778 - 62.4167		1063875.00	41.061	39.000	1.053	0.00	0.000	39.000	0.000
	62.4167 - 61.0556		1086575.00	41.469	39.000	1.063	0.00	0.000	39.000	0.000
	61.0556 - 59.6944		1109375.00	41.870	39.000	1.074	0.00	0.000	39.000	0.000
	59.6944 - 58.3333		1132283.33	42.263	39.000	1.084	0.00	0.000	39.000	0.000
	58.3333 - 56.9722		1155291.67	42.649	39.000	1.094	0.00	0.000	39.000	0.000
	56.9722 - 55.6111		1178400.00	43.028	39.000	1.103	0.00	0.000	39.000	0.000
	55.6111 - 54.25		1201616.67	43.400	39.000	1.113	0.00	0.000	39.000	0.000
	54.25 - 52.8889		1224933.33	43.764	39.000	1.122	0.00	0.000	39.000	0.000
	52.8889 - 51.5278		1248358.33	44.123	39.000	1.131	0.00	0.000	39.000	0.000
	51.5278 - 50.1667		1271883.33	44.474	39.000	1.140	0.00	0.000	39.000	0.000
	50.1667 - 48.8056		1295508.33	44.819	39.000	1.149	0.00	0.000	39.000	0.000
	48.8056 - 47.4444		1319233.33	45.158	39.000	1.158	0.00	0.000	39.000	0.000
	47.4444 - 46.0833		1343066.67	45.491	39.000	1.166	0.00	0.000	39.000	0.000
	46.0833 - 44.7222		1366991.67	45.817	39.000	1.175	0.00	0.000	39.000	0.000
	44.7222 - 43.3611		1391025.00	46.138	39.000	1.183	0.00	0.000	39.000	0.000
	43.3611 - 42		1415158.00	46.453	39.000	1.191	0.00	0.000	39.000	0.000

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	<b>Project</b> Vista (NY001)	<b>Date</b> 15:58:28 03/20/15
	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Size	Actual $M_x$ lb-ft	Actual $f_{bx}$ ksi	Allow. $F_{bx}$ ksi	Ratio $\frac{f_{bx}}{F_{bx}}$	Actual $M_y$ lb-ft	Actual $f_{by}$ ksi	Allow. $F_{by}$ ksi	Ratio $\frac{f_{by}}{F_{by}}$
	42 - 36.5		33 708276.	22.305	39.000	0.572	0.00	0.000	39.000	0.000
L4	42 - 36.5	TP44.4991x38.3393x0.375	67 805649.	21.937	39.000	0.562	0.00	0.000	39.000	0.000
	36.5 - 34.5789		17 1548875.	41.566	39.000	1.066	0.00	0.000	39.000	0.000
	34.5789 - 32.6579		.00 1584000.	41.898	39.000	1.074	0.00	0.000	39.000	0.000
	32.6579 - 30.7368		.00 1619291.	42.222	39.000	1.083	0.00	0.000	39.000	0.000
	30.7368 - 28.8158		.67 1654766.	42.537	39.000	1.091	0.00	0.000	39.000	0.000
	28.8158 - 26.8947		.67 1690408.	42.843	39.000	1.099	0.00	0.000	39.000	0.000
	26.8947 - 24.9737		.33 1726225.	43.141	39.000	1.106	0.00	0.000	39.000	0.000
	24.9737 - 23.0526		.00 1762216.	43.431	39.000	1.114	0.00	0.000	39.000	0.000
	23.0526 - 21.1316		.67 1798375.	43.712	39.000	1.121	0.00	0.000	39.000	0.000
	21.1316 - 19.2105		.00 1834700.	43.986	39.000	1.128	0.00	0.000	39.000	0.000
	19.2105 - 17.2895		.00 1871200.	44.253	39.000	1.135	0.00	0.000	39.000	0.000
	17.2895 - 15.3684		.00 1907866.	44.512	39.000	1.141	0.00	0.000	39.000	0.000
	15.3684 - 13.4474		.67 1944691.	44.764	39.000	1.148	0.00	0.000	39.000	0.000
	13.4474 - 11.5263		.67 1981691.	45.010	39.000	1.154	0.00	0.000	39.000	0.000
	11.5263 - 9.60526		.67 2018858.	45.248	39.000	1.160	0.00	0.000	39.000	0.000
	9.60526 - 7.68421		.33 2056191.	45.480	39.000	1.166	0.00	0.000	39.000	0.000
	7.68421 - 5.76316		.67 2093683.	45.706	39.000	1.172	0.00	0.000	39.000	0.000
	5.76316 - 3.84211		.33 2131341.	45.926	39.000	1.178	0.00	0.000	39.000	0.000
	3.84211 - 1.92105		.67 2169158.	46.139	39.000	1.183	0.00	0.000	39.000	0.000
	1.92105 - 0		.33 2207133.	46.347	39.000	1.188	0.00	0.000	39.000	0.000

### Pole Shear Design Data

Section No.	Elevation ft	Size	Actual $V$ lb	Actual $f_v$ ksi	Allow. $F_v$ ksi	Ratio $\frac{f_v}{F_v}$	Actual $T$ lb-ft	Actual $f_{vt}$ ksi	Allow. $F_{vt}$ ksi	Ratio $\frac{f_{vt}}{F_{vt}}$
L1	150 - 147.447	TP31.773x24x0.1875	1741.88	0.121	26.000	0.009	0.00	0.000	26.000	0.000
	147.447 - 144.895		1910.38	0.131	26.000	0.010	54.77	0.004	26.000	0.000
	144.895 - 142.342		2051.39	0.138	26.000	0.011	69.88	0.004	26.000	0.000
	142.342 - 139.789		6122.74	0.406	26.000	0.031	69.88	0.004	26.000	0.000

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 17 of 23
	<b>Project</b> Vista (NY001)	<b>Date</b> 15:58:28 03/20/15
	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Size	Actual V lb	Actual f <sub>v</sub> ksi	Allow. F <sub>v</sub> ksi	Ratio $\frac{f_v}{F_v}$	Actual T lb-ft	Actual f <sub>vt</sub> ksi	Allow. F <sub>vt</sub> ksi	Ratio $\frac{f_{vt}}{F_{vt}}$
	139.789 - 137.237		6986.12	0.457	26.000	0.035	83.63	0.005	26.000	0.000
	137.237 - 134.684		7153.69	0.461	26.000	0.035	83.63	0.005	26.000	0.000
	134.684 - 132.132		7322.07	0.465	26.000	0.036	83.63	0.005	26.000	0.000
	132.132 - 129.579		12240.4	0.767	26.000	0.059	83.62	0.005	26.000	0.000
	129.579 - 127.026		0							
	127.026 - 124.474		12409.1	0.767	26.000	0.059	83.61	0.005	26.000	0.000
	124.474 - 121.921		0							
	121.921 - 119.368		12577.6	0.767	26.000	0.059	83.60	0.004	26.000	0.000
	119.368 - 116.816		0							
	116.816 - 114.263		12745.9	0.767	26.000	0.059	83.59	0.004	26.000	0.000
	114.263 - 111.711		0							
	111.711 - 109.158		12914.0	0.767	26.000	0.059	83.58	0.004	26.000	0.000
	109.158 - 106.605		0							
	106.605 - 104.053		13081.9	0.766	26.000	0.059	83.56	0.004	26.000	0.000
	104.053 - 101.5		0							
	101.5 - 97		13249.4	0.766	26.000	0.059	83.55	0.004	26.000	0.000
	97 - 95.5833		0							
	95.5833 - 94.1667		13416.6	0.766	26.000	0.059	83.53	0.004	26.000	0.000
	94.1667 - 92.75		0							
	92.75 - 91.3333		13583.4	0.766	26.000	0.059	83.50	0.004	26.000	0.000
	91.3333 - 89.9167		0							
	89.9167 - 88.5		13749.7	0.766	26.000	0.059	83.48	0.004	26.000	0.000
	88.5 - 87.0833		0							
	87.0833 - 85.6667		13915.6	0.765	26.000	0.059	83.46	0.004	26.000	0.000
	85.6667 - 84.25		0							
	84.25 - 82.8333		14081.0	0.765	26.000	0.059	83.43	0.003	26.000	0.000
	82.8333 - 81.4167		0							
	81.4167 - 80		6417.05	0.341	26.000	0.026	36.61	0.001	26.000	0.000
L2	80 - 78.5833	TP35.8711x30.738x0.25	8006.54	0.324	26.000	0.025	46.79	0.001	26.000	0.000
	78.5833 - 77.1667		14512.4	0.583	26.000	0.045	83.39	0.003	26.000	0.000
			0							
			14605.0	0.583	26.000	0.045	83.38	0.003	26.000	0.000
			0							
			14697.2	0.583	26.000	0.045	83.36	0.002	26.000	0.000
			0							
			14789.1	0.583	26.000	0.045	83.35	0.002	26.000	0.000
			0							
			14880.6	0.583	26.000	0.045	83.34	0.002	26.000	0.000
			0							
			14971.8	0.582	26.000	0.045	83.32	0.002	26.000	0.000
			0							
			15062.6	0.582	26.000	0.045	83.31	0.002	26.000	0.000
			0							
			15153.0	0.582	26.000	0.045	83.29	0.002	26.000	0.000
			0							
			15243.1	0.582	26.000	0.045	83.28	0.002	26.000	0.000
			0							
			15332.8	0.582	26.000	0.045	83.27	0.002	26.000	0.000
			0							
			15422.1	0.581	26.000	0.045	83.25	0.002	26.000	0.000
			0							
			15511.0	0.581	26.000	0.045	83.24	0.002	26.000	0.000
			0							
			15599.5	0.581	26.000	0.045	83.22	0.002	26.000	0.000
			0							
			15687.6	0.581	26.000	0.045	83.21	0.002	26.000	0.000
			0							

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	Job	150007 (Vista Fire Dept.)	Page	18 of 23
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	Client	InSite Towers	Designed by	mdeboer

Section No.	Elevation ft	Size	Actual V lb	Actual f <sub>v</sub> ksi	Allow. F <sub>v</sub> ksi	Ratio f <sub>v</sub> F <sub>v</sub>	Actual T lb-ft	Actual f <sub>vt</sub> ksi	Allow. F <sub>vt</sub> ksi	Ratio f <sub>vt</sub> F <sub>vt</sub>
	77.1667 - 75.75		15775.3 0	0.580	26.000	0.045	83.20	0.002	26.000	0.000
	75.75 - 74.3333		15862.5 0	0.580	26.000	0.045	83.18	0.002	26.000	0.000
	74.3333 - 72.9167		15949.4 0	0.580	26.000	0.045	83.17	0.002	26.000	0.000
	72.9167 - 71.5		16035.8 0	0.579	26.000	0.045	83.16	0.002	26.000	0.000
L3	71.5 - 66.5	TP39.771x34.6378x0.3125	7590.78	0.269	26.000	0.021	39.82	0.001	26.000	0.000
	71.5 - 66.5		8835.33	0.254	26.000	0.020	43.32	0.001	26.000	0.000
	66.5 - 65.1389		16494.5	0.472	26.000	0.036	78.20	0.002	26.000	0.000
	65.1389 - 63.7778		16571.1	0.471	26.000	0.036	78.19	0.001	26.000	0.000
	63.7778 - 62.4167		16647.6	0.471	26.000	0.036	78.18	0.001	26.000	0.000
	62.4167 - 61.0556		16724.0	0.470	26.000	0.036	78.17	0.001	26.000	0.000
	61.0556 - 59.6944		16800.3	0.470	26.000	0.036	78.16	0.001	26.000	0.000
	59.6944 - 58.3333		16876.5	0.469	26.000	0.036	78.15	0.001	26.000	0.000
	58.3333 - 56.9722		16952.5	0.469	26.000	0.036	78.14	0.001	26.000	0.000
	56.9722 - 55.6111		17028.4	0.468	26.000	0.036	78.13	0.001	26.000	0.000
	55.6111 - 54.25		17104.2	0.468	26.000	0.036	78.12	0.001	26.000	0.000
	54.25 - 52.8889		17179.8	0.467	26.000	0.036	78.11	0.001	26.000	0.000
	52.8889 - 51.5278		17255.3	0.467	26.000	0.036	78.10	0.001	26.000	0.000
	51.5278 - 50.1667		17330.6	0.467	26.000	0.036	78.09	0.001	26.000	0.000
	50.1667 - 48.8056		17405.8	0.466	26.000	0.036	78.08	0.001	26.000	0.000
	48.8056 - 47.4444		17480.8	0.466	26.000	0.036	78.08	0.001	26.000	0.000
	47.4444 - 46.0833	17555.7	0.465	26.000	0.036	78.07	0.001	26.000	0.000	
	46.0833 - 44.7222	17630.4	0.465	26.000	0.036	78.06	0.001	26.000	0.000	
	44.7222 - 43.3611	17705.0	0.464	26.000	0.036	78.05	0.001	26.000	0.000	
	43.3611 - 42	17779.4	0.464	26.000	0.036	78.04	0.001	26.000	0.000	
L4	42 - 36.5	TP44.4991x38.3393x0.375	8599.87	0.220	26.000	0.017	36.50	0.001	26.000	0.000
	42 - 36.5		9571.23	0.207	26.000	0.016	41.53	0.001	26.000	0.000
	36.5 - 34.5789		18254.2	0.393	26.000	0.030	78.02	0.001	26.000	0.000
	34.5789 - 32.6579		18345.6	0.392	26.000	0.030	78.01	0.001	26.000	0.000
	32.6579 - 30.7368		18436.5	0.391	26.000	0.030	78.00	0.001	26.000	0.000
	30.7368 - 28.8158		18527.1	0.390	26.000	0.030	78.00	0.001	26.000	0.000
	28.8158 - 26.8947		18617.2	0.389	26.000	0.030	77.99	0.001	26.000	0.000
	26.8947 - 24.9737		18707.0	0.388	26.000	0.030	77.98	0.001	26.000	0.000
	24.9737 - 23.0527		18797.9	0.387	26.000	0.030	77.97	0.001	26.000	0.000
	23.0527 - 21.1317		18888.8	0.386	26.000	0.030	77.96	0.001	26.000	0.000

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 19 of 23
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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Size	Actual $V$ lb	Actual $f_k$ ksi	Allow. $F_v$ ksi	Ratio $\frac{f_k}{F_v}$	Actual $T$ lb-ft	Actual $f_{vt}$ ksi	Allow. $F_{vt}$ ksi	Ratio $\frac{f_{vt}}{F_{vt}}$
	24.9737 - 23.0526		18796.3	0.388	26.000	0.030	77.98	0.001	26.000	0.000
	23.0526 - 21.1316		18885.2	0.387	26.000	0.030	77.97	0.001	26.000	0.000
	21.1316 - 19.2105		18973.7	0.386	26.000	0.030	77.96	0.001	26.000	0.000
	19.2105 - 17.2895		19061.8	0.385	26.000	0.030	77.96	0.001	26.000	0.000
	17.2895 - 15.3684		19149.4	0.384	26.000	0.030	77.95	0.001	26.000	0.000
	15.3684 - 13.4474		19236.6	0.383	26.000	0.029	77.95	0.001	26.000	0.000
	13.4474 - 11.5263		19323.4	0.383	26.000	0.029	77.95	0.001	26.000	0.000
	11.5263 - 9.60526		19409.7	0.382	26.000	0.029	77.94	0.001	26.000	0.000
	9.60526 - 7.68421		19495.5	0.381	26.000	0.029	77.94	0.001	26.000	0.000
	7.68421 - 5.76316		19580.9	0.380	26.000	0.029	77.94	0.001	26.000	0.000
	5.76316 - 3.84211		19665.9	0.379	26.000	0.029	77.94	0.001	26.000	0.000
	3.84211 - 1.92105		19750.4	0.378	26.000	0.029	77.94	0.001	26.000	0.000
	1.92105 - 0		19834.4	0.378	26.000	0.029	77.94	0.001	26.000	0.000

### Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P}{P_u}$	Ratio $\frac{f_{bx}}{F_{bx}}$	Ratio $\frac{f_{bv}}{F_{bv}}$	Ratio $\frac{f_v}{F_v}$	Ratio $\frac{f_{vt}}{F_{vt}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	150 - 147.447	0.003	0.006	0.000	0.009	0.000	0.009	1.333	H1-3+VT ✓
	147.447 - 144.895	0.004	0.022	0.000	0.010	0.000	0.026	1.333	H1-3+VT ✓
	144.895 - 142.342	0.004	0.038	0.000	0.011	0.000	0.043	1.333	H1-3+VT ✓
	142.342 - 139.789	0.009	0.058	0.000	0.031	0.000	0.067	1.333	H1-3+VT ✓
	139.789 - 137.237	0.006	0.114	0.000	0.035	0.000	0.121	1.333	H1-3+VT ✓
	137.237 - 134.684	0.007	0.167	0.000	0.035	0.000	0.173	1.333	H1-3+VT ✓
	134.684 - 132.132	0.007	0.217	0.000	0.036	0.000	0.224	1.333	H1-3+VT ✓
	132.132 - 129.579	0.009	0.272	0.000	0.059	0.000	0.282	1.333	H1-3+VT ✓
	129.579 - 127.026	0.009	0.354	0.000	0.059	0.000	0.364	1.333	H1-3+VT ✓
	127.026 - 124.474	0.010	0.432	0.000	0.059	0.000	0.442	1.333	H1-3+VT ✓

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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$P_a$	$f_{bx}$	$f_{by}$	$f_v$	$f_{vt}$			
	124.474 - 121.921	0.010	0.507	0.000	0.059	0.000	0.518	1.333	H1-3+VT ✓
	121.921 - 119.368	0.010	0.581	0.000	0.059	0.000	0.592	1.333	H1-3+VT ✓
	119.368 - 116.816	0.010	0.654	0.000	0.059	0.000	0.665	1.333	H1-3+VT ✓
	116.816 - 114.263	0.011	0.725	0.000	0.059	0.000	0.737	1.333	H1-3+VT ✓
	114.263 - 111.711	0.011	0.795	0.000	0.059	0.000	0.807	1.333	H1-3+VT ✓
	111.711 - 109.158	0.011	0.863	0.000	0.059	0.000	0.875	1.333	H1-3+VT ✓
	109.158 - 106.605	0.011	0.929	0.000	0.059	0.000	0.941	1.333	H1-3+VT ✓
	106.605 - 104.053	0.012	0.994	0.000	0.059	0.000	1.006	1.333	H1-3+VT ✓
	104.053 - 101.5	0.012	1.057	0.000	0.059	0.000	1.070	1.333	H1-3+VT ✓
	101.5 - 97	0.006	0.512	0.000	0.026	0.000	0.518	1.333	H1-3+VT ✓
L2	101.5 - 97	0.005	0.479	0.000	0.025	0.000	0.484	1.333	H1-3+VT ✓
	97 - 95.5833	0.009	0.875	0.000	0.045	0.000	0.885	1.333	H1-3+VT ✓
	95.5833 - 94.1667	0.010	0.896	0.000	0.045	0.000	0.906	1.333	H1-3+VT ✓
	94.1667 - 92.75	0.010	0.917	0.000	0.045	0.000	0.927	1.333	H1-3+VT ✓
	92.75 - 91.3333	0.010	0.937	0.000	0.045	0.000	0.947	1.333	H1-3+VT ✓
	91.3333 - 89.9167	0.010	0.957	0.000	0.045	0.000	0.967	1.333	H1-3+VT ✓
	89.9167 - 88.5	0.010	0.976	0.000	0.045	0.000	0.986	1.333	H1-3+VT ✓
	88.5 - 87.0833	0.010	0.995	0.000	0.045	0.000	1.006	1.333	H1-3+VT ✓
	87.0833 - 85.6667	0.010	1.013	0.000	0.045	0.000	1.024	1.333	H1-3+VT ✓
	85.6667 - 84.25	0.010	1.032	0.000	0.045	0.000	1.043	1.333	H1-3+VT ✓
	84.25 - 82.8333	0.010	1.050	0.000	0.045	0.000	1.061	1.333	H1-3+VT ✓
	82.8333 - 81.4167	0.011	1.067	0.000	0.045	0.000	1.078	1.333	H1-3+VT ✓
	81.4167 - 80	0.011	1.084	0.000	0.045	0.000	1.096	1.333	H1-3+VT ✓
	80 - 78.5833	0.011	1.101	0.000	0.045	0.000	1.113	1.333	H1-3+VT ✓
	78.5833 - 77.1667	0.011	1.118	0.000	0.045	0.000	1.129	1.333	H1-3+VT ✓
	77.1667 - 75.75	0.011	1.134	0.000	0.045	0.000	1.146	1.333	H1-3+VT ✓

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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$P$	$f_{br}$	$f_{bv}$	$f_c$	$f_{vt}$			
		$P_a$	$F_{br}$	$F_{bv}$	$F_c$	$F_{vt}$			
	75.75 - 74.3333	0.011	1.150	0.000	0.045	0.000	1.162	1.333	H1-3+VT ✓
	74.3333 - 72.9167	0.011	1.166	0.000	0.045	0.000	1.177	1.333	H1-3+VT ✓
	72.9167 - 71.5	0.011	1.181	0.000	0.045	0.000	1.193	1.333	H1-3+VT ✓
	71.5 - 66.5	0.006	0.563	0.000	0.021	0.000	0.568	1.333	H1-3+VT ✓
L3	71.5 - 66.5	0.006	0.555	0.000	0.020	0.000	0.560	1.333	H1-3+VT ✓
	66.5 - 65.1389	0.010	1.031	0.000	0.036	0.000	1.042	1.333	H1-3+VT ✓
	65.1389 - 63.7778	0.010	1.042	0.000	0.036	0.000	1.053	1.333	H1-3+VT ✓
	63.7778 - 62.4167	0.010	1.053	0.000	0.036	0.000	1.064	1.333	H1-3+VT ✓
	62.4167 - 61.0556	0.010	1.063	0.000	0.036	0.000	1.074	1.333	H1-3+VT ✓
	61.0556 - 59.6944	0.011	1.074	0.000	0.036	0.000	1.084	1.333	H1-3+VT ✓
	59.6944 - 58.3333	0.011	1.084	0.000	0.036	0.000	1.095	1.333	H1-3+VT ✓
	58.3333 - 56.9722	0.011	1.094	0.000	0.036	0.000	1.105	1.333	H1-3+VT ✓
	56.9722 - 55.6111	0.011	1.103	0.000	0.036	0.000	1.115	1.333	H1-3+VT ✓
	55.6111 - 54.25	0.011	1.113	0.000	0.036	0.000	1.124	1.333	H1-3+VT ✓
	54.25 - 52.8889	0.011	1.122	0.000	0.036	0.000	1.134	1.333	H1-3+VT ✓
	52.8889 - 51.5278	0.011	1.131	0.000	0.036	0.000	1.143	1.333	H1-3+VT ✓
	51.5278 - 50.1667	0.011	1.140	0.000	0.036	0.000	1.152	1.333	H1-3+VT ✓
	50.1667 - 48.8056	0.011	1.149	0.000	0.036	0.000	1.161	1.333	H1-3+VT ✓
	48.8056 - 47.4444	0.012	1.158	0.000	0.036	0.000	1.170	1.333	H1-3+VT ✓
	47.4444 - 46.0833	0.012	1.166	0.000	0.036	0.000	1.178	1.333	H1-3+VT ✓
	46.0833 - 44.7222	0.012	1.175	0.000	0.036	0.000	1.187	1.333	H1-3+VT ✓
	44.7222 - 43.3611	0.012	1.183	0.000	0.036	0.000	1.195	1.333	H1-3+VT ✓
	43.3611 - 42	0.012	1.191	0.000	0.036	0.000	1.203	1.333	H1-3+VT ✓
	42 - 36.5	0.006	0.572	0.000	0.017	0.000	0.578	1.333	H1-3+VT ✓
L4	42 - 36.5	0.006	0.562	0.000	0.016	0.000	0.568	1.333	H1-3+VT ✓
	36.5 - 34.5789	0.011	1.066	0.000	0.030	0.000	1.077	1.333	H1-3+VT ✓

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	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

Section No.	Elevation ft	Ratio P	Ratio $f_{bx}$	Ratio $f_{by}$	Ratio $f_x$	Ratio $f_y$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$P_o$	$F_{bx}$	$F_{by}$	$F_x$	$F_y$			
	34.5789 - 32.6579	0.011	1.074	0.000	0.030	0.000	1.086	1.333	H1-3+VT ✓
	32.6579 - 30.7368	0.011	1.083	0.000	0.030	0.000	1.094	1.333	H1-3+VT ✓
	30.7368 - 28.8158	0.011	1.091	0.000	0.030	0.000	1.102	1.333	H1-3+VT ✓
	28.8158 - 26.8947	0.012	1.099	0.000	0.030	0.000	1.110	1.333	H1-3+VT ✓
	26.8947 - 24.9737	0.012	1.106	0.000	0.030	0.000	1.118	1.333	H1-3+VT ✓
	24.9737 - 23.0526	0.012	1.114	0.000	0.030	0.000	1.126	1.333	H1-3+VT ✓
	23.0526 - 21.1316	0.012	1.121	0.000	0.030	0.000	1.133	1.333	H1-3+VT ✓
	21.1316 - 19.2105	0.012	1.128	0.000	0.030	0.000	1.140	1.333	H1-3+VT ✓
	19.2105 - 17.2895	0.012	1.135	0.000	0.030	0.000	1.147	1.333	H1-3+VT ✓
	17.2895 - 15.3684	0.012	1.141	0.000	0.030	0.000	1.154	1.333	H1-3+VT ✓
	15.3684 - 13.4474	0.012	1.148	0.000	0.029	0.000	1.161	1.333	H1-3+VT ✓
	13.4474 - 11.5263	0.013	1.154	0.000	0.029	0.000	1.167	1.333	H1-3+VT ✓
	11.5263 - 9.60526	0.013	1.160	0.000	0.029	0.000	1.173	1.333	H1-3+VT ✓
	9.60526 - 7.68421	0.013	1.166	0.000	0.029	0.000	1.179	1.333	H1-3+VT ✓
	7.68421 - 5.76316	0.013	1.172	0.000	0.029	0.000	1.185	1.333	H1-3+VT ✓
	5.76316 - 3.84211	0.013	1.178	0.000	0.029	0.000	1.191	1.333	H1-3+VT ✓
	3.84211 - 1.92105	0.013	1.183	0.000	0.029	0.000	1.197	1.333	H1-3+VT ✓
	1.92105 - 0	0.013	1.188	0.000	0.029	0.000	1.202	1.333	H1-3+VT ✓

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P <sub>allow</sub> lb	% Capacity	Pass Fail
L1	150 - 97	Pole	TP31.773x24x0.1875	1	-8170.67	915973.58	80.3	Pass
L2	97 - 66.5	Pole	TP35.8711x30.738x0.25	2	-12357.70	1439186.72	89.5	Pass
L3	66.5 - 36.5	Pole	TP39.771x34.6378x0.3125	3	-17838.60	1993061.53	90.3	Pass
L4	36.5 - 0	Pole	TP44.4991x38.3393x0.375	4	-27426.00	2730290.48	90.2	Pass
Summary								
Pole (L3)							90.3	Pass
<b>RATING =</b>							<b>90.3</b>	<b>Pass</b>

<b>tnxTower</b>  <b>Bennett &amp; Pless</b> 3395 Northeast Expressway, Suite 110 Atlanta, Georgia Phone: 678-990-8700 FAX: 678-990-8701	<b>Job</b> 150007 (Vista Fire Dept.)	<b>Page</b> 23 of 23
	<b>Project</b> Vista (NY001)	<b>Date</b> 15:58:28 03/20/15
	<b>Client</b> InSite Towers	<b>Designed by</b> mdeboer

	Job	NY001	Page	1 of 1
	Project	Vista NY Site	Date	3/20/2015 15:42
	Client	Vista Fire Department	Design	MD

**MONOPOLE SPLICE BOLT & SPLICE PLATE ANALYSIS**

Design / Analysis in Accordance to EIA-222-F

**ALLOWABLE SPLICE LOADS**

Bottom Width:	44.499	in
Moment:	2207.14	k-ft
Axial:	27.44	kips
Shear:	19.81	kips

**Baseft SPLICE PLATE PROPERTIES**

Plate Type	A572-50		
	Fy	50.0	ksi
	Fu	65.0	ksi
Plate Width	57.500	in	
Plate Thk	2.250	in	
Weld Type	Butt (Butt or Lap)		
Bolt Pattern	R Round or Square		
Stiffeners	N Yes or No		
No. Stiffeners	/ bolt (1 or 2)		
Stiffener Hgt		in	
Stiffener Thk		in	

**Baseft SPLICE BOLT PROPERTIES**

Bolt Type	#18J ASTM A615		
	Fy	75.0	ksi
	Fu	100.0	ksi
Bolt Diameter	2.250	in	( 57.2 mm )
# of Bolts	14		
Bolt Circle	51.50	in	( 1,308 mm )

**RESULTS**

<b>Baseft SPLICE PLATE</b>		
Base Plate Stress	36.3	ksi
Base Plate Capacity	50.0	ksi
Stress Ratio	72.5%	
<b>Passes</b>		
<b>Baseft SPLICE BOLT</b>		
Anchor Bolt Force (C)	148.9	kips
Anchor Bolt Force (T)	145.0	kips
Anchor Bolt Capacity (Fy)	194.9	kips
Stress Ratio	76.4%	
<b>Passes</b>		
<b>Base ft SPLICE</b>		

**CALCULATIONS:**

**FORCES:**

M =	26486	k-in	ABFT = My/lb - P/n =	144.98	kips	ALLOWABLE TENSION FORCE
y =	25.75	in	ABFC = My/lb + P/n =	148.90	kips	ALLOWABLE COMPRESSION FORCE
lb =	4641	in <sup>4</sup>				
P =	27.44	kips				
n =	14					

NOTE: Round Bolt Pattern Formula is nearly identical to the Square Bolt Pattern and used for all calculations.

**BOLT CAPACITIES:**

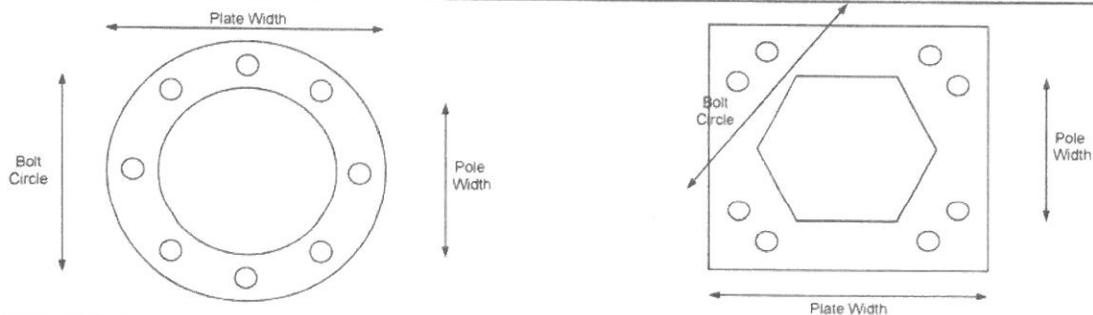
AG =	3.976	in <sup>2</sup> - Gross Area	Tall = 0.60AEFy(4/3) =	194.86	kips	YIELD STRENGTH & EFFECTIVE AREA (USED)
AE =	3.248	in <sup>2</sup> - Net Area	Tall = 0.33AGFu(4/3) =	174.95	kips	ULTIMATE STRENGTH & GROSS AREA

**PLATE CAPACITIES:**

larm =	2.376	in [ BC - Pole Width ] / 2 - Bolt/2	Seff =	9.751	in <sup>3</sup>
beff 1 =	18.000	in [ 8T ]	Mt =	353.709	k-in
beff 2 =	11.557	in [ Bolt c/c Distance ]			
t =	2.250	in [ Thickness ]	Mt / Seff =	36.275	ksi
			0.75 fy (4/3) =	50.000	ksi
					ALLOWABLE PLATE STRESS
					ALLOWABLE PLATE CAPACITY

**STIFFENERS:**

beff 3 =	0.000	in [ Stiffener c/c Distance ]	leff =	0.000	in <sup>4</sup>
t (per side) =	0.000	in [ Thickness ]	Seff =	0.000	in <sup>4</sup>
H (per side) =	0.000	in [ Effective Height taken as 1/3 ]			
Area =	0.000	in <sup>2</sup>	Mt / Seff =	0.000	ksi
y =	0.000	in	0.75 fy (4/3) =	0.000	ksi
					ALLOWABLE PLATE STRESS
					ALLOWABLE PLATE CAPACITY



PROJECT No: InSite No. NY001  
 PROJECT NAME: Vista Fire Department  
InSite Towers  
 DATE: March 20, 2015

ENG: MD  
 CHK: \_\_\_\_\_  
 PAGE: of

EIA-222-F

**SINGLE GLOBAL FOUNDATION WITH PIER(S) CHECKS**

Global Tower Reactions		Allowable Loads	Calculated Reactions	Allowable Resistance		
<input type="radio"/> TIA-G	Maximum Moment	2,207.14 k-ft	Disturbing Moment	2,365.6	4,803.0 k-ft	pass 49.3%
<input checked="" type="radio"/> EIA-F	Axial Load	27.44 kips	Maximum Bearing	2.35	4.00 kips	pass 58.8% [GOVERNS]
	Shear Load	19.81 kips	Punching Shear	750.7	1,744.4 kips	pass 43.0%
	Pier Rebar Required	(minimum only, use PCACOL for total quantity)		(17) #10 @ 12.20 in **MINIMUM**		
	Rebar Required	(checked rebar for 6" min to 24" max spacing)		(23) #10 @ 12.27 in		SF=3.40

Soil Parameters	Soils Report	Pier Geometry	Pad Geometry
$\phi$	30.0 °	Qty of Piers	1
Water Level	10.00 ft (3.05 m)	Width (Bp)	6.00 ft
Soil Dry Density ( $\gamma_{dry}$ )	0.120 kcf (18.8 kN/m <sup>3</sup> )	Width (Wp)	6.00 ft
Soil Sub Density ( $\gamma_{sub}$ )	0.057 kcf (8.95 kN/m <sup>3</sup> )	Height (Hp)	5.00 ft
All. Bearing Pressure	4.000 ksf (191.5 kPa)	Pier Type	R (Rnd or Sq)
Bearing Safety Factor	2	Conc $\gamma_{dry}$	0.150 kcf (23.6)
		Width (Bm)	23.00 ft
		Width (Wm)	23.00 ft
		Height (Hm)	3.00 ft
		Depth (D)	7.50 ft

Volume of Concrete/Soil	Concrete (64.0cu yd)		
	1 Pier	Mat	Soil
Depth (above)	0.50	--	-- ft
Depth (dry)	4.50	3.00	4.50 ft
Depth (submerged)	0.00	0.00	0.00 ft
Volume (above)	14.11	--	-- ft <sup>3</sup>
Volume (dry)	127.01	1,587.00	2831.79 ft <sup>3</sup>
Volume (submerged)	0.00	0	0.00 ft <sup>3</sup>
Total	141	1587	2832 ft <sup>3</sup>

Calculations	Factored	Allowable
Axial Download	--	27.4 kips
Weight of Concrete (not factored)	--	259.2 kips(64.0yds)
Weight of Soil (not factored)	--	339.8 kips
Total Download (P)	--	626.5 kips
Resisting Moment Arm	--	11.5 ft
Moment Resistance	--	4803.0 k-ft
		(divide by 1.5 - cl. 7.2.4.5)

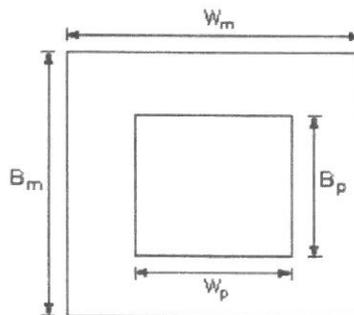
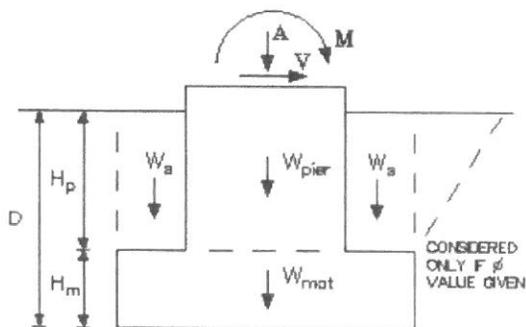
Concrete Reinforcing Design	MAT	PIER
$f_c$	3.000 ksi (20.7 MPa)	
$f_y$	60.00 ksi (413.7 MPa)	
Steel (Metric/ASTM)	ASTM	ASTM
Bar size	10 #	10 #
	1.270 in <sup>2</sup>	1.270 in <sup>2</sup>

Bearing Capacity Check	
Contact Area	-- 529.00 ft <sup>2</sup>
Calculate eccentricity e	-- 3.78 ft >L/6
Calculate (c = L/2 - e)	-- 7.72 ft
1) $q_{max} = P/A \cdot (1+6e/L)$	-- 2.35
2) $q_{max} = 2P / b \cdot 3c$	-- -- ksf [GOV]
$q_{allowable}$	-- 4.00 ksf
	(not factored)

Slab Reinforcing		Wgt of Rebar
1/2 Disturbing Moment	1182.81 kip-ft	8,946 lbs
Ku	47.22	
$\rho$	0.00088	
4/3 * $\rho$ if $\rho < \rho_{min}$	0.00118	
$\rho_{min} \geq 0.0018$	0.00180	
As	15.90 in <sup>2</sup>	
Number of bars	23 bars on	12.27 in c/c

Check for 2-Way Shear (Punching)	
Shear Area ( $b_o \times d$ )	-- 73.72 ft <sup>2</sup>
Factored Bearing Stress	-- 1.60 ksf
Factored Shear Force	-- 750.74 kips
Factored Shear Resistance	-- 1744.4 kips
Check for 2-way Shear	-- 0.43
	(ACI-318)

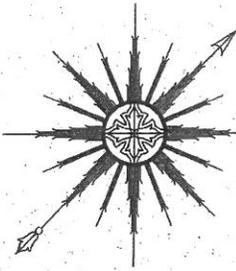
Note: The 1/2 moment is derived from a bending moment diagram that considered the uplift and download components at the exact face width of the tower.



- M = 2207.1 k-ft
- A = 27.4 kips
- V = 19.8 kips
- Bp = 6.00 ft
- Wp = 6.00 ft
- Hp = 5.00 ft
- Bm = 23.00 ft
- Wm = 23.00 ft
- Hm = 3.00 ft
- D = 7.50 ft
- V<sub>mat</sub> = 1728.1 cu ft
- Rebar = (23) #10 @ 12.27 in

Appendix B

Customer Application

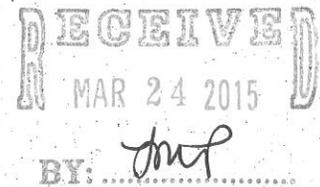


# ALL-POINTS TECHNOLOGY CORPORATION, P.C.

Homeland Towers, LLC  
Attn: Manny Vicente  
46 Mill Plain Road, 2<sup>nd</sup> Floor  
Danbury, CT 06811

January 27, 2011

RE: Vista FD – 377 Smith Ridge Rd. South Salem, NY  
Project Certifications  
APT Project #NY283100



Dear Mr. Vicente:

Enclosed herewith, please find the following Project Documents as required by the Town of Lewisboro's Planning Board December 15, 2009 resolution regarding the above referenced telecommunication facility development:

- 1) Resolution Item #23: As-Built map depicting planted materials (wetland mitigation and screening), 4 copies;
- 2) Resolution Item #24: As-Built Survey prepared by a NYS Licensed Land Surveyor, 4 copies;
- 3) Resolution Item #25: Stormwater Compliance Certification by NYS Professional Engineer, 4 copies;
- 4) Resolution Item #28: Wetlands Compliance Statement in support of Town of Lewisboro's Wetland Certificate of Compliance to be issued by the Town Wetlands Inspector, 4 copies; and
- 5) Resolution Item #33: Final Statement of Special Inspections certified by the Engineer of Record for this project.

We trust the enclosed information will meet with the Town's approval and assist you in closing out this project and obtaining your Certificate of Compliance.

Please do not hesitate to contact us should you have any questions or need additional information.

Sincerely,  
APT ENGINEERING

Scott M. Chasse, P.E.  
Principal

January 19, 2011

Hon. Chairman Kerner and Members of the Planning Board  
Town of Lewisboro  
Onatru Farm  
99 Elmwood Road  
South Salem, New York 10590

**RE: Homeland Towers – Vista Fire Department  
377 Smith Ridge Road, South Salem, NY  
BBV Project No. A061045**

Dear Chairman Kerner and Members of the Planning Board:

This letter is written to certify that the site work performed for the development of the above-referenced cell tower project was completed in substantial conformance with the following plans prepared by this office dated 3/3/09, last revised 11/5/09:

- SP-1 Site Plan
- SP-2 Site Grading & Sedimentation / Erosion Control Plan
- SP-3 Access Road Profile & Site Details

Verification of the required site improvements was confirmed through site inspections and as-built surveys completed by this office.

Please contact this office if you have any questions or require additional information.

Very truly yours,  
**Barrett, Bonacci & Van Weele, P.C.**

Michael C. Marinis, P.E.





January 11, 2011

Vanasse Hangen Brustlin, Inc.

Ref: 40505.16

Hon. Chairman Kerner and Members of the Planning Board  
Town of Lewisboro  
Onatru Farm  
99 Elmwood Road  
South Salem, New York 10590

Re: Wetland Mitigation Plan  
Homeland Towers Facility Project  
377 Smith Ridge Road, South Salem, NY

Dear Chairman Kerner and Members of the Planning Board:

On behalf of Homeland Towers, Vanasse Hangen Brustlin, Inc. (VHB) is pleased to report on the wetland mitigation activities that were completed by the end of December 2010 in accordance with the approved Wetland Mitigation Plan (Sheet No. WM-1) approved in the Planning Board's Resolution (December 15, 2009) for the referenced project.

The proposed mitigation plan included three distinct areas referred to as Pond Adjacent Area Enhancement, Wetland Adjacent Area Enhancement and Debris Removal Area. Generally, the mitigation work consisted of three main action items: 1) removal of invasive species; 2) removal of debris from wetland; and, 3) planting of native species. Provided below is a summary of wetland mitigation work items that have been accomplished to date.

#### **Invasive Species Removal**

A relatively small community of Japanese knotweed was located in the western end of the project site to the north and south of the gravel access drive entrance at the rear of the fire station parking lot. Japanese knotweed was treated with an application of RODEO® herbicide by James Gorman (James Gorman's Water Management; invasive species removal contractor & licensed herbicide applicator) on October 29, 2010 in accordance with the approved plan.

As previously reported to the Planning Board, an alternative control method for invasive shrubs (multiflora rose, Japanese barberry, winged euonymus) and vines (Asiatic bittersweet) using mechanical extraction of the plant's base and root system was utilized. These invasive plants were mechanically removed and plant material was properly

54 Tuttle Place  
Middletown, Connecticut 06457-1847  
860.632.1500 • FAX 860.632.7879  
email: info@vhb.com  
www.vhb.com

removed off site between October 30, 2010 and December 2, 2010 by W F Anderson Construction LLC. Dean Gustafson of VHB assisted WF Anderson Construction LLC in the identification and marking of invasive shrubs and vines for removal.

#### **Debris Removal**

As noted on the approved Wetland Mitigation Plan (Sheet No. WM-1), an area of debris was observed in the wetlands located northeast of the wireless telecommunications facility. This debris was removed from the wetlands in early October 2010 and disposed of properly by WF Anderson Construction LLC. In addition, debris was removed from wetland adjacent areas along the gravel access drive in the central and western portions of the project area in early December 2010.

#### **Native Plantings**

Hardscrabble Farms (North Salem, NY), the nursery supplying the various native shrubs and trees noted on the Wetland Mitigation Plan, was inspected by Dean Gustafson of VHB. Mr. Gustafson reviewed the nursery order with Bill Anderson of WF Anderson Construction LLC and one of the managers at Hardscrabble Farms for consistency with the planting schedule in the approved Wetland Mitigation Plan. The complete plant order was then selected from available nursery stock, during which time Mr. Gustafson assisted in the selection of healthy, vigorous plants.

All of the native shrubs and trees listed on the approved Wetland Mitigation Plan were properly planted in the three distinct areas referred to as Pond Adjacent Area Enhancement, Wetland Adjacent Area Enhancement and Debris Removal Area. Planting occurred on December 4, 2010. Dean Gustafson of VHB confirmed the number of plants delivered to the site and assisted in the random spacing and placement of native plants to simulate natural growth patterns. Fallen logs and branches and other natural debris displaced by the compound and access drive were also noted to have been relocated to the mitigation areas to provide beneficial habitat features for wildlife. A final inspection on December 15, 2010 revealed that all of the plants had been properly planted and mulched with at least 3 inches of leaf mulch.

#### **Outstanding Wetland Mitigation Items**

Due to the time of the year that construction activities were nearing completion (beyond the growing season), planting of exposed soil areas associated with the wireless telecommunications facility, access road and stormwater management areas with the specified seed mix was not fully completed. No significant exposed soil areas were created by the removal of invasive shrubs or vines. Exposed soil areas will be sown with a New England Erosion conservation/ wildlife seed mix in the early spring of 2011 (e.g., mid-late April). The currently installed erosion control measures will adequately protect nearby



wetland resources until these areas can be permanently stabilized with seeding in the spring.

The existing gravel access drive through the wetland area just south of the existing fire pond was properly protected with swamp mats during construction of the wireless telecommunications facility. Upon removal of the swamp mats, some light vehicle/equipment traffic occurred generally in association landscaping and wetland mitigation work. This resulted in some slight rutting of the existing gravel surface, which is now frozen in place. These ruts will be raked smooth following the release of frost in the late winter/early spring 2011 to match the existing soil surface grades to the north and south to avoid creation of shallow pools that could impact migrating wetland species. Any exposed soils in this existing disturbed wetland area will be sown with a New England wetland seed mix the early spring of 2011 (e.g., mid-late April).

VHB will inspect the site in early spring 2011 to ensure that the above-noted outstanding work items have been properly completed and a subsequent report will be submitted to the Planning Board by May 15, 2011.

#### **Post Construction Monitoring of Wetland Mitigation Plan**

Future monitoring of the mitigation area, including monitoring for recurrence of invasive species, will be performed by Homeland Towers in accordance with Note No. 19 on the Wetland Mitigation Plan and Condition No. 30 of the Planning Board's Resolution. The first inspection will occur in the mid to late spring of 2011 once plants have fully leafed out and have started to put on new growth. If deemed necessary, treatment of future invasives during the post-construction monitoring phase of the project will be completed using the original methods detailed on the Wetland Mitigation Plan with effectiveness evaluated each year of the five-year monitoring phase. Prior to any treatment, the Town of Lewisboro Wetland Inspector will be contacted to discuss the recommended corrective measures.

Please feel free to contact me at (860) 632-1500 ext. 2339 with any questions or if you require additional information.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

  
Dean Gustafson  
Senior Wetland Scientist

cc: Manny Vicente, Homeland Towers  
Scott M. Chasse, P.E., All-Points Technology Corp., P.C.



# Final Report of Special Inspections

---

Project: *Rawland telecom site*  
Location: *Vista FD 377 Smith Ridge Road South Salem, NY 10590*  
Owner: *Homeland Towers, LLC*  
Owner's Address: *46 Mill Plain Rd, 2<sup>nd</sup> floor*  
*Danbury, CT 06811*  
Engineer of Record: *Scott M. Chasse*  
Structural Engineer of Record: *Michael Farrell Plahovinsak*  
*DaVinci Engineering, Inc.*

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved other than the following:

Comments:

*(Attach continuation sheets if required to complete the description of corrections.)*

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted,  
Special Inspector

\_\_\_\_\_  
Scott M. Chasse, P.E.

*Scott M. Chasse*  
\_\_\_\_\_  
Signature

*1/19/11*  
\_\_\_\_\_  
Date



# Statement of Special Inspections

Project: *Rawland telecom site*

Location: *Vista FD 377 Smith Ridge Road South Salem, NY 10590*

Owner: *Homeland Towers, LLC*

Design Professional in Responsible Charge: *Scott M. Chasse, P.E.*

This *Statement of Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Special Inspections* encompass the following disciplines:

- Structural       Mechanical/Electrical/Plumbing  
 Architectural       Other: \_\_\_\_\_

The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible Charge.

A *Final Report of Special Inspections* documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: *Monthly*

or  per attached schedule.

Prepared by:

*Scott M. Chasse, P.E.*

(type or print name)

*Scott M. Chasse*  
Signature

*3/30/10*  
Date



Owner's Authorization:

Building Official's Acceptance:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

# Schedule of Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Soils and Foundations  | <input type="checkbox"/> Spray Fire Resistant Material         |
| <input checked="" type="checkbox"/> Cast-in-Place Concrete | <input type="checkbox"/> Wood Construction                     |
| <input type="checkbox"/> Precast Concrete                  | <input type="checkbox"/> Exterior Insulation and Finish System |
| <input type="checkbox"/> Masonry                           | <input type="checkbox"/> Mechanical & Electrical Systems       |
| <input checked="" type="checkbox"/> Structural Steel       | <input type="checkbox"/> Architectural Systems                 |
| <input type="checkbox"/> Cold-Formed Steel Framing         | <input type="checkbox"/> Special Cases                         |

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. Special Inspection Coordinator	Scott M. Chasse, P.E. All-Points Technology Corporation, P.C.	3 Saddlebrook Drive Killingworth, CT 06419 860-663-1697 <a href="mailto:schasse@allpointstech.com">schasse@allpointstech.com</a>
2. Inspector	Terracon Consulting Engineers & Scientists	210 Hammer Mill Road Rocky Hill, CT 06067 860-721-1900 <a href="mailto:RWMcLaren@terracon.com">RWMcLaren@terracon.com</a>
3. Inspector	Robert E. Adair, Jr. P.E. All-Points Technology Corporation, P.C.	3 Saddlebrook Drive Killingworth, CT 06419 860-663-1697 <a href="mailto:schasse@allpointstech.com">schasse@allpointstech.com</a>
4. Testing Agency	Terracon Consulting Engineers & Scientists	210 Hammer Mill Road Rocky Hill, CT 06067 860-721-1900 <a href="mailto:RWMcLaren@terracon.com">RWMcLaren@terracon.com</a>
5. Testing Agency		
6. Other		

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

## Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

### Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

### American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

### American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

### American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.
------	---

### International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

### National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

### Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector
----------	----------------------------

### Other

# Soils and Foundations

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	2  PE/GE	<p><i>Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.</i></p> <p><i>Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill</i></p> <p><i>Continuously observe/monitor installation of tower foundation excavation</i></p>
2. Controlled Structural Fill	4  NICET-ST	<p><i>Test select backfill for tower foundation for compliance and consistency with geotechnical report (95% Modified Proctor – ASTM D1557, Method C)</i></p>
3. Deep Foundations	N/A	
4. Load Testing	N/A	
4. Other:	N/A	

# Structural Steel

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures <input type="checkbox"/> Fabricator Exempt	3 PE-SE	<i>Review shop fabrication and quality control procedures.</i>
2. Material Certification	4 AWS/AISC- SSI	<i>Review certified mill test reports and identification markings on Structural Steel, high-strength bolts, nuts and welding electrodes</i>
3. Open Web Steel Joists	N/A	
4. Bolting	4 AWS/AISC- SSI	<i>Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence.</i>
5. Welding	N/A	
6. Shear Connectors	N/A	
7. Structural Details	N/A	
8. Metal Deck	N/A	
9. Other:	2 PE	<i>Review testing lab's inspection and test reports.</i>

# Cast-in-Place Concrete

Item	Agency # (Qualif.)	Scope
1. Mix Design	4 ACI-CCI	<i>Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.</i>
2. Material Certification	N/A	
3. Reinforcement Installation	4 ACI-CCI	<i>Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters – FOR TOWER FOUNDATIONS</i>
4. Post-Tensioning Operations	N/A	
5. Welding of Reinforcing	N/A	
6. Anchor Rods	4 ACI-CCI	<i>Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.</i>
7. Concrete Placement	4 ACI-CCI	<i>Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.</i>
8. Sampling and Testing of Concrete	4 ACI-CFTT	<i>Test concrete compressive strength (ASTM C31 &amp; C39), slump (ASTM C143), air-content (ASTM C231) and temperature (ASTM C1064).</i>
9. Curing and Protection	4 ACI-CCI	<i>Inspect curing, cold weather protection and hot weather protection procedures.</i>
10. Other:		



October 13, 2010

All-Points Technology Corporation, P.C.  
3 Saddlebrook Drive  
Killingworth, CT 06419

Attn: Mr. Scott Chasse, P.E., Principal  
P: [860] 663 1697  
F: [860] 663 0935  
E: schasse@allpointstech.com

Re: Subgrade Review  
Proposed Telecommunications Tower  
Vista Fire Department  
South Salem, New York  
Terracon Project No. J2105105

Dear Mr. Chasse:

On October 11, 2010, Mr. Brian Opp, P.E. of Terracon Consultants, Inc. (Terracon) visited the above-referenced site to review the exposed foundation subgrade. The project consists of the construction of a 150-foot high steel monopole telecommunications tower within a 50-by 80-foot fenced compound area. The site is located east of the existing Vista Fire Department Station, in South Salem (a hamlet of Lewisboro), New York. Foundation plans and details were made available at the time of the site visit. Terracon previously prepared a geotechnical report dated February 2, 2010.

Prior to Terracon's site visit, Brois Construction Companies (BCC), of Elmsford, New York, had excavated an approximately 23-foot square excavation for the proposed tower foundation to depths ranging from approximately 3 to 5 feet below the existing ground surface. The southern third of the excavation consisted of shallow bedrock while the remainder of the exposed subgrade consisted of native glacial till. Groundwater was not observed at the time of our site visit.

We recommend that the tower foundation not be founded partially on bedrock and partially on glacial till. Instead, the bedrock should be overexcavated below the proposed foundation subgrade level to allow placement of a minimum 8-inch thick layer of ¾-inch crushed stone to provide a cushion over the portion of the footing underlain by bedrock. The remainder of the tower foundation subgrade (bearing on glacial till) shall be prepared in accordance with our geotechnical report. Provided that the above recommendations are followed, the tower foundation subgrade level will be suitable for foundation support.



Terracon Consultants, Inc. 201 Hammer Mill Road Rocky Hill, CT 06067  
P [860] 721 1900 F [860] 721 1939 terracon.com

Geotechnical

Environmental

Construction Materials

Facilities

**Subgrade Review**

Proposed Telecommunications Tower ■ South Salem, New York  
October 13, 2010 ■ Terracon Project No. J2105105

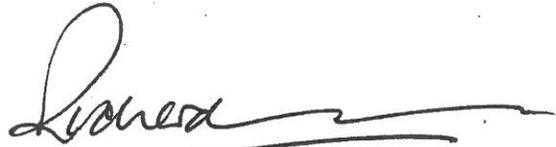
We trust that this letter satisfy your needs at this time. Should you have questions or require additional information, please do not hesitate to contact our office.

Sincerely,  
**Terracon Consultants, Inc.**



Brian D. Opp, P.E.  
Senior Geotechnical Engineer

/ekc/J2105105



Richard W.M. McLaren, P.E.  
Senior Associate  
Geotechnical Department Manager



## DAILY SUMMARY REPORT

Report Number: J2105105.0004

Service Date: 10/20/10

# Terracon

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

---

### Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

### Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

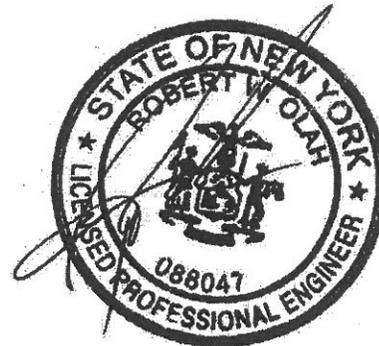
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A Terracon representative visited the above-referenced site to provide construction monitoring services limited to earthwork.

Earthwork activities (fill placement) were in general accordance with project specifications. Field density testing was completed and the results indicated that the required densities were achieved.

Please refer to the attached report no(s). .0004A and .0004B for further information.

Weather during today's activities was sunny, 60s F.



---

### Report Distribution:

(1) All-Points Technology Corporation P  
C

Reviewed By:

A handwritten signature in black ink, appearing to read "Stephen Lanne", written over a horizontal line.

Stephen, Lanne

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# EARTHWORK OBSERVATION REPORT

Report Number: J2105105.0004A  
Service Date: 10/20/10  
Report Date: 10/27/10

**Terracon**  
201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

---

**Client**

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

**Project**

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

---

**Services Requested By:** John Ryan  
**Earthwork Contractor:** WF Anderson  
**Observed Location(s):** Communications tower foundation  
**Subgrade Review:** Prior to the placement of fill the subgrade was reviewed and consisted of previously placed fill. The subgrade was observed to be firm and stable.  
**Fill Type Placed:** Structural Fill  
**Proctor No.(s):** J2105105.0001  
**Fill Description:** Poorly graded sand with silt and gravel, light brown  
**Source Of Fill:** Previously excavated soils  
**Fill Placement:** The fill was observed to be placed in approximately 12-inch thick lifts. Compactive efforts were applied with a vibratory plate compactor. The fill placed appeared firm and stable during the application of compactive efforts.  
**Field Density Test Results:** Field density tests were conducted on the fill placed today utilizing the nuclear method (ASTM D6938). Fifteen field density tests were performed. The test results indicated that the minimum specified 95% compaction requirement had been achieved as compared to ASTM D1557. Refer to the attached Field Density Test Summary for individual test data.  
**Reported To:** John Ryan

---

Terracon Rep.: Mark K. Grano

**Report Distribution:**

(1) All-Points Technology Corporation P  
C

Reviewed By:



Stephen, Lanne

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# FIELD DENSITY TEST REPORT

Report Number: J2105105.0004B  
Service Date: 10/20/10  
Report Date: 10/26/10

# Terracon

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

## Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

## Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

## Material Information

Mat. No.	Proctor Ref. No.	Classification and Description	Laboratory Test Method	Lab Test Data		Project Requirements	
				Optimum Water Content (%)	Max. Lab Dry Unit Weight (pcf)	Water Content (%)	Minimum Compaction (%)
1	J2105105.0001	Poorly graded sand with silt and gravel, gray to brown		7.6	128.1		

## Field Test Data

Test No.	Test Location	Lift / Elev.	Mat. No.	Probe Depth (in)	Wet Density (pcf)	Water Content (pcf)	Water Content (%)	Dry Unit Weight (pcf)	Percent Compaction (%)
1	cell tower footing area	4' BG	1	8	135.8	12.7	10.3	123.1	96
2	cell tower footing area	4' BG	1	8	135.4	11.3	9.1	124.1	97
3	cell tower footing area	4' BG	1	8	136.1	12.6	10.2	123.5	96
4	cell tower footing area	3' BG	1	8	135.3	12.3	10.0	123.0	96
5	cell tower footing area	3' BG	1	8	134.8	11.4	9.2	123.4	96
6	cell tower footing area	3' BG	1	8	136.3	12.3	9.9	124.0	97
7	cell tower footing area	2' BG	1	8	135.2	13.0	10.6	122.2	95
8	cell tower footing area	2' BG	1	8	136.6	12.4	10.0	124.2	97
9	cell tower footing area	2' BG	1	8	134.9	11.9	9.7	123.0	96
10	cell tower footing area	1' BG	1	8	135.3	10.1	8.1	125.2	98
11	cell tower footing area	1' BG	1	8	135.7	12.0	9.7	123.7	97
12	cell tower footing area	1' BG	1	8	135.8	11.0	8.8	124.8	97
13	cell tower footing area	Grade	1	8	135.1	9.9	7.9	125.2	98
14	cell tower footing area	Grade	1	8	136.1	10.8	8.6	125.3	98
15	cell tower footing area	Grade	1	8	136.1	12.6	10.2	123.5	96

Datum: BG = Below Grade

Gauge ID:

Std. Cnt. M: 472

Std. Cnt. D: 3644

Comments: Test and/or retest results on this report meet project requirements as noted above.

Services: Perform in-place density and moisture content tests to determine degree of compaction and material moisture condition.

Terracon Rep.: Mark K. Grano

Reported To:

Contractor:

Report Distribution:

(1) All-Points Technology Corporation P C

Reviewed By:



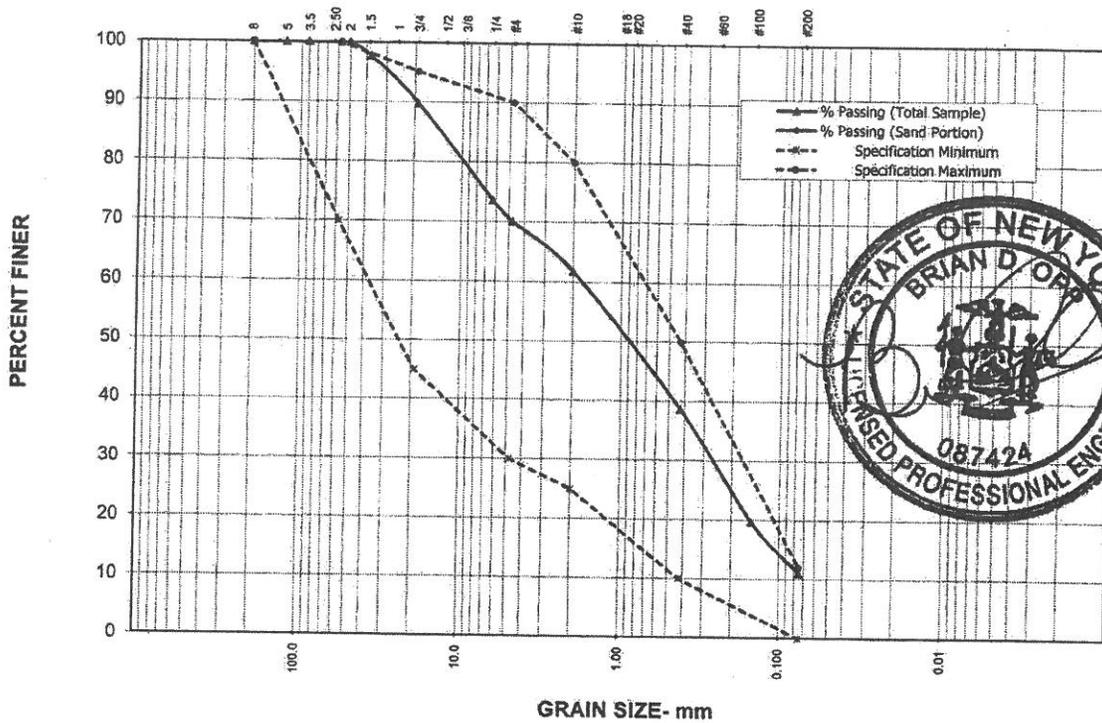
Stephen, Lanne

Test Methods: ASTM D6938

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# GRAIN SIZE DISTRIBUTION TEST REPORT

ASTM TEST METHODS: C136, C117, D2487



% Cobbles	% Gravel	Coarse	Medium	Fine	% Fines	
0.0	30	14.1	39.2	46.7	Silt (>0.002mm)	Clay (<0.002mm)
					% Sand 59	
					11	

USCS Classification: Poorly graded sand with silt and gravel, gray to brown (SP-SM)

Sieve Size (mm)	U.S. Sieve Size (in.)	Cumulative Wt. Retained	% Passing (Total Sample)	% Passing (Sand Portion)	Specification Minimum	Specification Maximum
200.0	8"	0.00	100		100	100
125.0	5"	0.00	100			
90.0	3.5"	0.00	100			
57.0	2.25"	0.00	100		70	100
50.0	2"	0.00	100			
37.5	1.5"	353.00	98			
25.0	1"					
19.0	3/4"	1565.00	90		45	95
12.5	1/2"					
9.5	3/8"					
6.3	1/4"	4034.00	74			
4.75	#4	4571.00	70		30	90
2.00	#10	43.00	62		25	80
0.425	#40	163.00	39		10	50
0.250	#60					
0.150	#100	261.00	20			
0.075	#200	306.00	11		0	12
Total Dry Wt.		15286	g			
Split Wt.		363	g			

Project: <b>Homeland Vista Fire Department</b>	Project No.: <b>J2105015</b>	Date: <b>10/20/2010</b>
City: <b>South Salem, NY</b>	Specification: <b>Terracon Structural Fill</b>	Report No: <b>J2105105.0001</b>
Source: <b>On-site soils</b>	Sampled from: <b>stock pile</b>	
201 Hammer Mill Road Rocky Hill, CT 06067 860-721-1900 (p) 860-721-1939 (f) <a href="http://www.terracon.com/">http://www.terracon.com/</a>	Remarks: <b>Approved for use as structural fill</b>	
	Cc= 0.6      Cu = 30.0	
	Tested By: <b>J. Kirk</b>	Date: <b>10/16/2010</b>
	Reviewed By: <b>B.D.O.</b>	Date: <b>10/20/2010</b>

# LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT

Report Number: J2105105.0001  
Service Date: 10/12/10  
Report Date: 10/14/10

**Terracon**  
201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

## Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

## Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number J2105105

## Material Information

Source of Material: On-site native soils  
Proposed Use: backfill over tower foundation

## Sample Information

Sample Date: 10/12/10  
Sampled By: Brian D. Opp  
Sample Location: stock pile

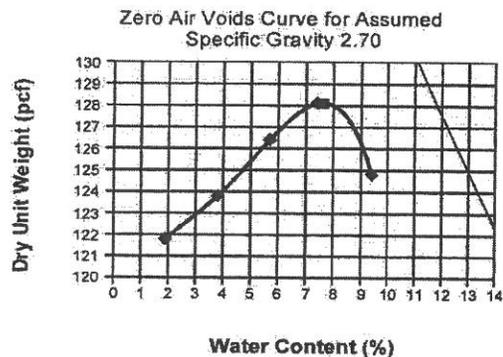
Sample Description: Poorly graded sand with silt and gravel,  
gray to brown

## Laboratory Test Data

Test Procedure:  
Test Method: Method C  
Sample Preparation: Wet  
Rammer Type: Mechanical  
Maximum Dry Unit Weight (pcf): 128.1  
Optimum Water Content (%): 7.6

	Result	Specifications
Liquid Limit:		
Plastic Limit:		
Plasticity Index:		
In-Place Moisture (%):		

USCS:



## Comments:

Services: Moisture-Density Relations

Terracon Rep.: Brian D. Opp

Reported To:

Contractor:

Report Distribution:

(1) All-Points Technology Corporation P C

Reviewed By:

Brian D. Opp  
Project Manager

Test Methods: ASTM D1140, ASTM D1557

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

**DAILY SUMMARY REPORT**

Report Number: J2105105.0003  
Service Date: 10/19/10  
Report Date: 10/18/10

**Terracon**

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

**Client**

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

**Project**

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

A Terracon representative visited the above-referenced site to provide construction monitoring services limited to review of concrete construction.

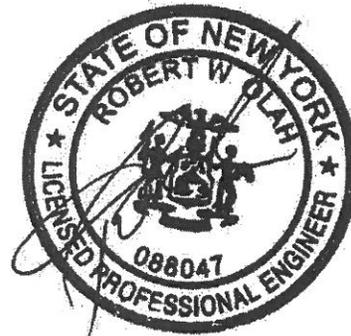
Cast-in-place concrete construction was reviewed. Formwork was reviewed and appeared adequately braced. Reinforcing steel was reviewed. Concrete compressive strength specimens were fabricated in general accordance with ASTM C31.

Please refer to the attached report no(s) .0003A for further information.

Laboratory test result report no(s) .0003B will be issued under separate cover.

Weather during today's activities was clear, 50s F.

Today's construction observations and materials testing were performed as a requirement of the Statement of Special Inspections for this project.



**Report Distribution:**

(1) All-Points Technology Corporation P  
C

Reviewed By:

*[Signature]*  
407

Stephen, Lanne

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

## CONCRETE OBSERVATION REPORT

Report Number: J2105105.0003A  
Service Date: 10/19/10  
Report Date: 10/29/10

# Terracon

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

### Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

### Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

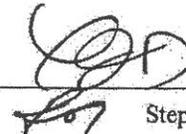
Project Number: J2105105

**Services Requested By:** All-Points Technology Corp, PC  
**Concrete Contractor:** W.F. Anderson  
**Concrete Placement:** Pier  
**Observation Location(s):** Communications tower footing  
**Reinforcing Steel Review:** Reinforcing steel was reviewed  
**Formwork Review:** Formwork was reviewed  
**Concrete Type:** 4000-psi, air-entrained concrete supplied by O&G (Mix ID: 4087)  
**Method of Placement:** Chute  
**Method of Consolidation:** Mechanical Vibrator  
**Tests Performed:** Concrete slump, air and temperature measurements were performed and the results were in accordance with project specifications.  
**Test Specimens Fabricated:** A total of 6 compressive strength specimens [Set No(s): 3] were fabricated during today's concrete activities.  
**Weather Protection:** None observed prior to this writer's departure from the site.  
**Summary:** Based on our observations, cast-in-place concrete construction activities at the above-referenced locations appeared to be completed in general accordance with the standard industry practices.

### Report Distribution:

(1) All-Points Technology Corporation P  
C

Reviewed By:



Stephen, Lanne

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

## DAILY SUMMARY REPORT

Report Number: J2105105.0002  
Service Date: 10/18/10  
Report Date: 10/15/10

# Terracon

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

---

### Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

### Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

---

A Terracon representative visited the above-referenced site to provide construction monitoring services limited to concrete observation and testing.

Cast-in-place concrete construction was reviewed and appeared to be in general accordance with project specifications. Prior to the concrete placement the subgrade was reviewed and appeared firm and stable. Formwork was reviewed and appeared geometrically correct and adequately braced. Reinforcing steel was reviewed and appeared to be in general accordance with project specifications. Concrete compressive strength specimens were fabricated in general accordance with ASTM C31.

Locations of today's project activities are illustrated on the attached Field Sketch.

Please refer to the attached report no(s) .0002A for further information.

Laboratory test result report no(s) .0002B will be issued under separate cover.

Weather during today's activities was cloudy, 50's F.

Today's observations and testing were performed as a requirement of the Statement of Special Inspections for this project.

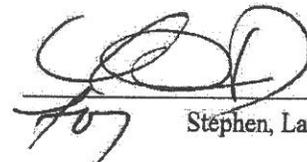


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### Report Distribution:

(1) All-Points Technology Corporation P  
C

Reviewed By:

  
Stephen, Lanne

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

## CONCRETE OBSERVATION REPORT

Report Number: J2105105.0002A  
Service Date: 10/18/10  
Report Date: 10/26/10

# Terracon

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

### Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

### Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

**Services Requested By:** All Points Technology

**Concrete Contractor:** Brois

**Concrete Placement:** Footing

**Observation Location(s):** Tower foundation

**Subgrade Review:** The subgrade consisted of ¾-inch crushed stone and was observed to be firm and stable.

**Reinforcing Steel Review:** Reinforcing steel was reviewed and was observed to be in general accordance with the project drawings identified below.

**Formwork Review:** Formwork was reviewed and was observed to be in general accordance with project drawings identified below.

**Concrete Type:** 4000-psi, air-entrained concrete supplied by O&G Industries, Mix ID:4087

**Method of Placement:** Chute

**Method of Consolidation:** Mechanical Vibrator

**Tests Performed:** Concrete slump, air and temperature measurements were performed and the results were in accordance with project specifications.

**Test Specimens Fabricated:** A total of 10 compressive strength specimens [Set No(s): 1, 2] were fabricated during today's concrete activities.

**Weather Protection:** Not observed prior to Terracon departing the site.

**Summary:** Based on our observations, cast-in-place concrete construction activities at the above-referenced locations appeared to be completed in general accordance with the project plans and specifications. Results were reported to John, BCC at the completion of today's activities.

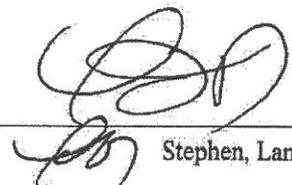
**Referenced Drawings:** 10235-1037 2/2 4128/16

Terracon Rep.: Michael A. Smurthwaite

### Report Distribution:

(1) All-Points Technology Corporation P  
C

Reviewed By:

  
Stephen, Lanne

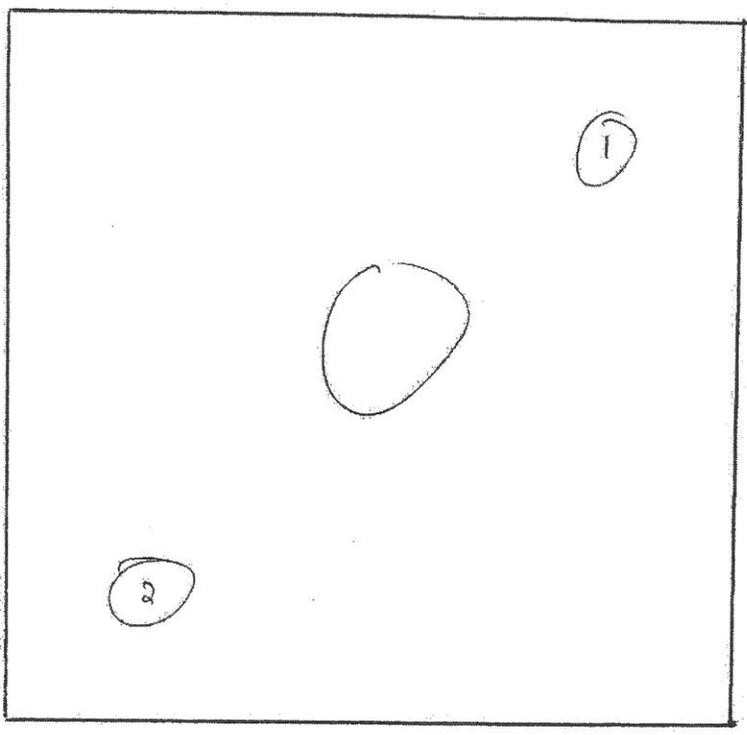
The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

FIELD SKETCH

Project: Homeland Vista

Project No.: 52105105      Date: 10/18

Terracon



⊙ Sample Locations

Not to scale

# CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Report Number: J2105105.0002B  
 Service Date: 10/18/10  
 Report Date: 11/15/10

# Terracon

201 Hammer Mill Road  
 Rocky Hill, CT 06067  
 860-721-1900

## Client

All-Points Technology Corporation P C  
 Attn: Scott Chasse  
 3 Saddlebrook Drive  
 Killingworth, CT 06419

## Project

Homeland Vista Fire Department Tower NY-1831/N-145  
 377 Smith Ridge Road  
 South Salem, NY 10590

Project Number: J2105105

## Material Information

Specified Strength: 4,000 psi @ 28 days

Mix ID: 4087  
 Supplier: O&G Industries  
 Batch Time: 1502 Plant:  
 Truck No.: 450 Ticket No.: 412286

## Field Test Data

Test	Result	Specification
Slump (in):	4	2 - 4
Air Content (%):	7.5	4.5 - 7.5
Concrete Temp. (F):	71	
Ambient Temp. (F):	55	
Plastic Unit Wt. (pcf):		

## Sample Information

Sample Date: 10/18/10 Sample Time: 1620  
 Sampled By: Michael A. Smurthwaite  
 Weather Conditions: clear 50sF  
 Accumulative Yards: 60 Batch Size (cy): 10  
 Placement Method: Direct Discharge  
 Water Added Before (gal): 0  
 Water Added After (gal): 0 Slump After (in): n/a  
 Sample Location: SW corner  
 Placement Location: Tower footing

## Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Specimen Weight (lbs)	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type
2	A	4.00	12.57	10/19/10	8.34	10/26/10	8	52,910	4,210	1
2	B	4.00	12.57	10/19/10	8.32	11/15/10	28	74,990	5,970	1
2	C	4.00	12.57	10/19/10	8.32	11/15/10	28	80,360	6,400	1
2	D	4.00	12.57	10/19/10	8.29	11/15/10	28	77,950	6,200	1
2	E	4.00	12.57	10/19/10	8.35	11/15/10	28	77,270	6,150	5
								Average (28 days)	6,180	

Comments: Compressive strength of 28 day cylinders complies with the specified strength. Not tested for plastic unit weight.

## Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength of samples (ASTM C-31, C-39, C-617 or C-1231).

Terracon Rep.: Michael A. Smurthwaite

Reported To:

Contractor:

Report Distribution:

(1) All-Points Technology Corporation P C



Reviewed By:

*[Signature]*  
 Stephen, Lanne

Test Methods: ASTM C 31, ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Report Number: J2105105.0002B  
Service Date: 10/18/10  
Report Date: 11/15/10

**Terracon**  
201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

## Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

## Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

## Material Information

Specified Strength: 4,000 psi @ 28 days

Mix ID: 4087  
Supplier: O&G Industries  
Batch Time: 1400 Plant:  
Truck No.: 403 Ticket No.: 412258

## Sample Information

Sample Date: 10/18/10 Sample Time: 1515  
Sampled By: Michael A. Smurthwaite  
Weather Conditions: clear, 50sF  
Accumulative Yards: 10 Batch Size (cy): 10  
Placement Method: Direct Discharge  
Water Added Before (gal): 0  
Water Added After (gal): 0 Slump After (in): n/a  
Sample Location: NE corner  
Placement Location: Tower Footing

## Field Test Data

Test	Result	Specification
Slump (in):	4	2 - 4
Air Content (%):	6.75	4.5 - 7.5
Concrete Temp. (F):	71	
Ambient Temp. (F):	59	
Plastic Unit Wt. (pcf):		

## Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Specimen Weight (lbs)	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type
1	A	4.00	12.57	10/19/10	8.31	10/26/10	8	52,520	4,180	1
1	B	4.00	12.57	10/19/10	8.32	11/15/10	28	73,660	5,860	1
1	C	4.00	12.57	10/19/10	8.36	11/15/10	28	74,600	5,940	1
1	D	4.00	12.57	10/19/10	8.24	11/15/10	28	71,490	5,690	4
1	E	4.00	12.57	10/19/10	8.33	11/15/10	28	76,360	6,080	5
Average (28 days)									5,890	

Comments: Compressive strength of 28 day cylinders complies with the specified strength. Not tested for plastic unit weight.

## Samples Made By: Terracon

Services: Obtain samples of fresh concrete from placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31, C-39, C-617 or C-1231).

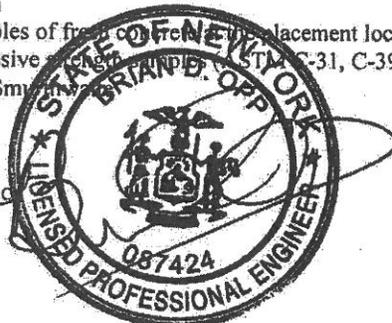
Terracon Rep.: Michael A. Smurthwaite

Reported To:

Contractor:

Report Distribution:

(1) All-Points Technology Corporation P C



Reviewed By:

Stephen, Lanne

Test Methods: ASTM C 31, ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Report Number: J2105105.0003B  
Service Date: 10/19/10  
Report Date: 11/16/10 Revision 1 - 28-day results

**Terracon**  
201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

## Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

## Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

## Material Information

Specified Strength: 4,000 psi @ 28 days

Mix ID: 4087  
Supplier: O&G  
Batch Time: 0248  
Truck No.: 450  
Plant: Ticket No.: 412286

## Field Test Data

Test	Result	Specification
Slump (in):	4	3 +/-1
Air Content (%):	7.5	6 +/-1.5
Concrete Temp. (F):	75	
Ambient Temp. (F):	55	
Plastic Unit Wt. (pcf):		

## Sample Information

Sample Date: 10/19/10 Sample Time: 0420  
Sampled By: Eugene Libera  
Weather Conditions: Cloudy  
Accumulative Yards: 60 Batch Size (cy): 10  
Placement Method: Chute  
Water Added Before (gal):  
Water Added After (gal):  
Sample Location: Southwest corner  
Placement Location: Tower footing

## Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Specimen Weight (lbs)	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type
3	A	4.00	12.57	10/20/10	8.80	10/26/10	7	49,790	3,960	1
3	B	4.00	12.57	10/20/10	8.86	11/16/10	28	70,470	5,610	1
3	C	4.00	12.57	10/20/10	8.96	11/16/10	28	69,950	5,570	1
3	D	4.00	12.57	10/20/10	8.94	11/16/10	28	67,960	5,410	1
3	E	4.00	12.57	10/20/10	8.94	11/16/10	28	72,920	5,800	5
3	F	4.00	12.57	10/20/10	8.90	11/16/10	28	63,420	5,050	5
Average (28 days)									5,490	

Comments: Compressive strength of 28 day cylinders complies with the specified strength. Not tested for plastic unit weight.

## Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast test compressive strength samples (ASTM C-31, C-39, C-617 or C-1231).

Terracon Rep.: Eugene Libera

Reported To:

Contractor:

Report Distribution:

(1) All-Points Technology Corporation P C

Reviewed By:



Test Methods: ASTM C 31, ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

## DAILY SUMMARY REPORT

Report Number: J2105105.0005  
Service Date: 11/01/10  
Report Date: 11/06/10

# Terracon

201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

---

### Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

### Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

---

A Terracon representative visited the above-referenced site to review monopole tower erection.

Structural steel was reviewed including erection and bolting and appeared to be in general accordance with project documents.

Please refer to the attached report no(s) .0005A for further information.

Weather during today's activities was clear, 40's F.

Today's observations were performed as a requirement of the Statement of Special Inspections for this project.



---

Contractor: HB Wireless Communications Services

**Report Distribution:**

(1) All-Points Technology Corporation P

C

Reviewed By:

Timothy J. Derr

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

## GENERAL OBSERVATION REPORT

Report Number: J2105105.0005A  
Service Date: 11/01/10  
Report Date: 11/06/10

**Terracon**  
201 Hammer Mill Road  
Rocky Hill, CT 06067  
860-721-1900

---

### Client

All-Points Technology Corporation P C  
Attn: Scott Chasse  
3 Saddlebrook Drive  
Killingworth, CT 06419

### Project

Homeland Vista Fire Department Tower NY-1831/N-145  
377 Smith Ridge Road  
South Salem, NY 10590

Project Number: J2105105

---

Terracon observed HB Wireless Communications Services, Inc. erect the 150 foot tall monopole communications tower. The tower has four sections with 3 splice slip connections. The anchor bolts were fastened to a snug tight plus condition with double top nuts and a single leveling nut which was also fastened to snug tight plus. The 3 slip splices connections appeared to have been placed in general conformance to the manufacturer's specified splice length criteria.

---

Services: Daily Summary Report

Terracon Rep.: James A. Carrano

Reported To:

Contractor: HB Wireless Communication Services

Report Distribution:

(1) All-Points Technology Corporation P  
C

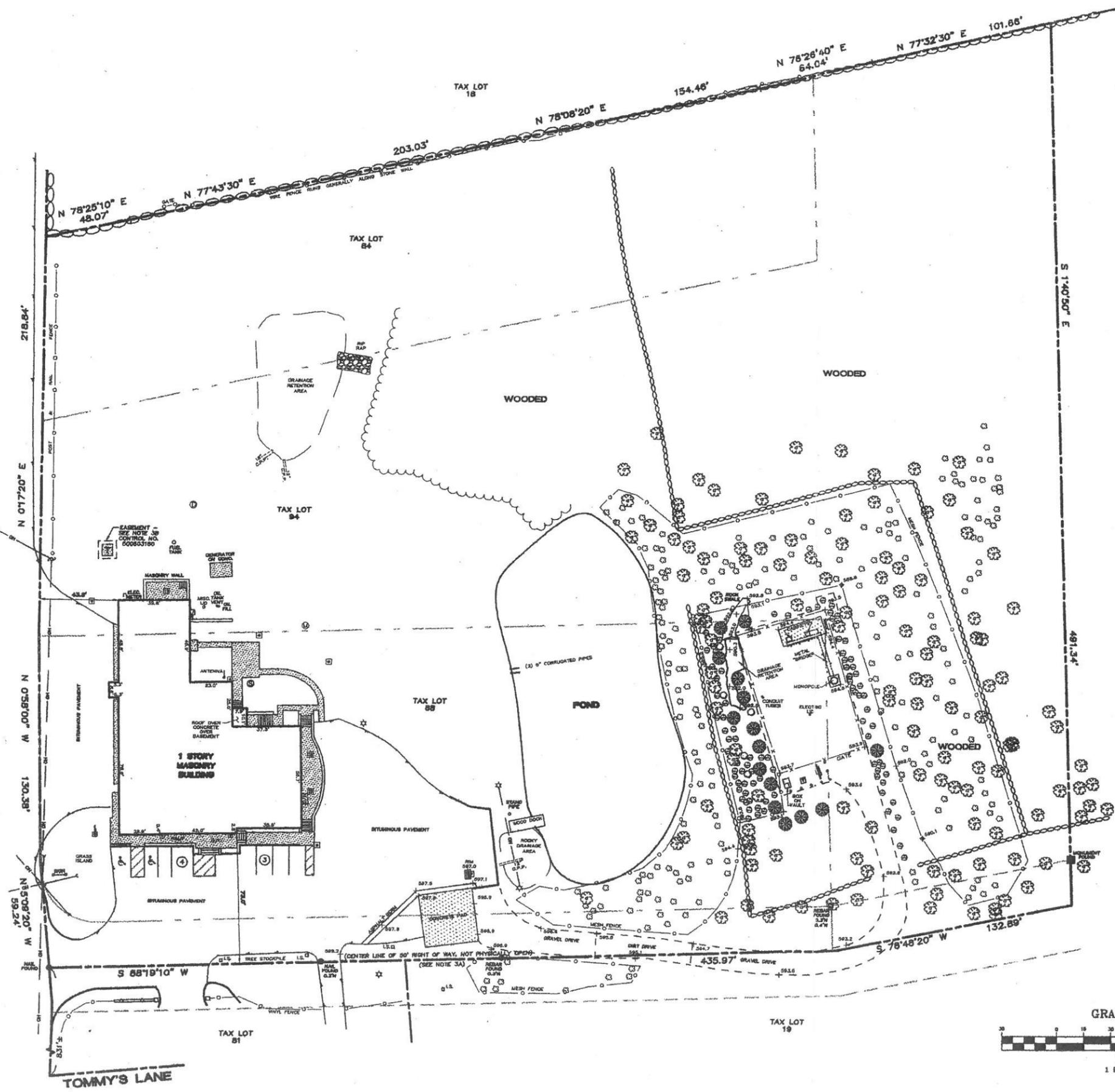
Reviewed By:

  
Timothy J. Derr

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

L:\A061045\dwg\wisa as built 12-30-10.dwg, AS BUILT, 1/25/2011 11:12:51 AM, Barrett, Bonacci & Van Weele / JD

SMITH RIDGE ROAD  
(ROUTE 123)



- NOTES:**
1. LOT AREA = ±299,210 SQ. FT. OR 5.95 ACRES.
  2. THIS SURVEY WAS PREPARED FOR A SPECIFIC PURPOSE, AND IS NOT INTENDED TO BE USED FOR A TRANSFER OF TITLE OR ANY FINANCIAL PURPOSE.
  3. THIS SURVEY IS BASED ON A TITLE COMMITMENT NO. 2010019D4WN, DATED 08/12/2010, PREPARED BY NATIONAL INVESTORS TITLE INSURANCE COMPANY, ACCORDING TO THIS TITLE COMMITMENT, THE PROPERTY IS SUBJECT TO:
    - (A) A RIGHT OF WAY RECORDED IN LIBER 2875 AT PAGE 211;
    - (B) EASEMENTS TO NY STATE ELECTRIC AND GAS CORP. RECORDED IN LIBER 8348 AT PAGE 258 AND IN CONTROL NO. 500631302;
    - (C) AN EASEMENT REFERENCED IN CONTROL NO. 402070488.
  4. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS PART OF THIS SURVEY.
  5. PROPERTY CORNER MONUMENTS WERE NOT PLACED AS PART OF THIS SURVEY.
  6. THE OFFSETS AND/OR DIMENSIONS SHOWN FROM THE STRUCTURES TO THE PROPERTY LINES ARE FOR A SPECIFIC PURPOSE AND USE AND THEREFORE ARE NOT INTENDED TO GUIDE IN THE ERECTION OF FENCES, RETAINING WALLS, POOLS, PATIOS, PLANTING AREAS, ADDITIONS TO BUILDINGS OR ANY OTHER CONSTRUCTION.

**LEGEND**

	CONCRETE CURB
	STONE WALL
	WALL
	EDGE OF PAVEMENT
	OVERHEAD WIRES
	CONCRETE
	UTILITY POLE
	GUY WIRE
	FIRE HYDRANT
	DRAINAGE INLET / STRUCTURE
	DRAINAGE CLEAN OUT
	STRUCTURE - MANHOLE
	STRUCTURE - DRAINAGE
	STRUCTURE - SANITARY
	LIGHT POLE
	CHAIN LINK FENCE
	STOCKADE FENCE
	OTHER FENCE
	FLAG POLE
	TRANSFORMER
	IRRIGATION SPOUT
	NEW "MITIGATION" SHRUB
	NEW LANDSCAPING SHRUB
	NEW LANDSCAPING TREE
	EXISTING TREE
	NEW EVERGREEN TREE
	WOODS LINE
	HANDICAP PARKING
	PARKING STALL COUNT
	BOLLARD

**CERTIFIED TO:**  
 NATIONAL INVESTORS TITLE INSURANCE COMPANY  
 HOMETOWN TOWERS  
 FIRST NIAGARA FUNDING, INC.

Date	By	Drawn by	Revision
Surveyed by: JC	Drafted by: JC	Checked by: WJB	

**BBV** Barrett Bonacci & Van Weele, PC  
 Civil Engineers  
 Surveyors  
 Planners  
 175A Commerce Drive  
 Hauppauge, NY 11788  
 T 631.435.1111  
 F 631.435.1022  
 www.bbvc.com

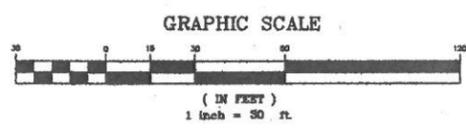
*John Carr*

Tax Map: D 3000, S 50A, S 9834, LOTS 84, 88 & 94

**PROPERTY SITUATE SOUTH SALEM**  
 TOWN OF LEWISBORO WESTCHESTER COUNTY, NY

**AS BUILT SURVEY**

Date	Scale	Project No.	Sheet No.
DEC. 29, 2010	1" = 30'	A061045	1 of 1



TOWN OF LEWISBORO  
WESTCHESTER COUNTY, N.Y.

COPY

OFFICE OF BUILDING INSPECTOR  
SOUTH SALEM, N. Y. 10590

Telephone  
914-763-3060



# CERTIFICATE OF OCCUPANCY

TOWN OF LEWISBORO  
SOUTH SALEM, N.Y. 10590

RECEIVED  
MAR 24 2015

BY: .....

Certificate No: 0025-11

Date: 2/16/2011

Location: 377 SMITH RIDGE RD.

Block/Lot/Section: 09834-088-050A LOT 88

THIS CERTIFIES that the building located at the premises indicated above conforms substantially to the approved plans and specifications heretofore filed in this office with Application for Building Permit dated 7/14/2009 pursuant to which Building Permit was issued, and conforms to all of the requirements of the applicable provisions of law. The occupancy for which this certificate is issued is:

COMMERCIAL ACCESS. STRUCTURE--INSTALLATION OF A 4000 SF WIRELESS TELECOMMUNICATION FACILITY: 150 FT MONOPOLE, SPRINT/EXEL 12 FT X 20 FT STRUCTURE, 10FT X 25 FT AT&T EQUIPMENT SLAB, 12 SPRINT/NEXTEL PANEL ANTENNAS & 12 AT&T PANEL ANTENNAS, 4 SPRINT/NEXTEL GPS ANTENNAS, AND 1 AT&T WIRELESS GPS ANTENNA, ALL SURROUNDED BY A FENCE PER: CAL. #20-09BZ, CAL#22-09ACARC,CAL#3-09PB

This certificate is issued to: VISTA FIRE DISTRICT  
(Owner, Lessee or tenant)

CERTIFICATE OF OCCUPANCY FEE

\$625.00

Total Paid:

\$625.00

Building Inspector:

TOWN OF LEWISBORO  
WESTCHESTER COUNTY, N.Y.

**COPY**

OFFICE OF BUILDING INSPECTOR  
SOUTH SALEM, N. Y. 10590

Telephone  
914-763-3060



# CERTIFICATE OF COMPLIANCE

TOWN OF LEWISBORO  
SOUTH SALEM, N.Y. 10590

RECEIVED  
MAR 24 2015

BY: .....

Certificate No: 0024-11

Date: 2/16/2011

Location: 377 SMITH RIDGE RD.

Block/Lot/Section: 09834-088-050A

Includes: LOT 88

THIS CERTIFIES that the building located at the premises indicated above conforms substantially to the approved plans and specifications heretofore filed in this office with Application for Building Permit dated 8/5/2010 pursuant to which Building Permit was issued, and conforms to all of the requirements of the applicable provisions of law. The occupancy for which this certificate is issued is:

COMMERCIAL MINOR WORK (UNMANNED TELECOMMUNICATION FACILITY INCLUDING INSTALLATION OF PANEL ANTENNAS ON POLE AND EQUIPMENT ON CONC. PAD AT GRADE,  
AT&T ANTENNA PER 3-09PB

This certificate is issued to: VISTA FIRE DISTRICT  
(Owner, Lessee or tenant)

CERTIFICATE OF COMPLIANCE FEE \$400.00

Total Paid: \$400.00

Building Inspector

*Paul Bond*

OFFICE OF BUILDING INSPECTOR  
SOUTH SALEM, N. Y. 10590

TOWN OF LEWISBORO  
WESTCHESTER COUNTY, N.Y.

COPY

Telephone  
914-763-3060



# CERTIFICATE OF COMPLIANCE

TOWN OF LEWISBORO  
SOUTH SALEM, N.Y. 10590

RECEIVED  
MAR 24 2015

BY: .....

Certificate No: 0023-11

Date: 2/16/2011

Location: 377 SMITH RIDGE RD.

Block/Lot/Section: 09834-088-050A

Includes: LOT 88

THIS CERTIFIES that the building located at the premises indicated above conforms substantially to the approved plans and specifications heretofore filed in this office with Application for Building Permit dated 11/9/2010 pursuant to which Building Permit was issued, and conforms to all of the requirements of the applicable provisions of law. The occupancy for which this certificate is issued is:

COMMERCIAL MINOR WORK; 200 AMP LINE FROM EXISTING BREAKER PANEL TO CUSTOMER CONTROL PANEL

This certificate is issued to: VISTA FIRE DISTRICT  
(Owner, Lessee or tenant)

CERTIFICATE OF COMPLIANCE FEE

\$25.00

Total Paid:

\$25.00

Building Inspector

*[Signature]*

**MEMORANDUM**

TO: Chairman Jerome Kerner, AIA and  
Members of Lewisboro Planning Board

CC: Lisa Pisera  
Judson Siebert, Esq.

FROM: Jan K. Johannessen, AICP   
Joseph M. Cermele, P.E., CFM   
Town Consulting Professionals

DATE: April 15, 2015

RE: Insite Wireless  
Vista Fire Department  
377 Smith Ridge Road  
Sheet 50A, Block 9834, Lots 84, 88, 94

---

On December 15, 2009, the Planning Board granted Special Use Permit Approval and a Wetland Activity Permit in connection with a 154-foot monopole tower and the installation of wireless telecommunication equipment to be operated by Sprint/Nextel and AT&T Wireless. The tower has been constructed and both wireless carriers, in addition to Verizon Wireless, are currently in operation. In accordance with the Planning Board's approving resolution, the Special Permit issued to Homeland Towers, LLC, Sprint/Nextel and AT&T Wireless is valid for a period of five (5) years and expired on December 15, 2014. The applicant has made application to renew the Special Permit and the following comments pertain to the materials submitted in connection with the renewal application.

1. It is not clear who is making the application and which wireless carriers the renewal will apply. As the Special Permit applies to the tower owner (formerly Homeland Towers, LLC and currently Insite Towers, LLC), Sprint/Nextel and AT&T Wireless, it is recommended that a joint application be made by the tower owner and each applicable wireless carrier. Further, it may make sense for Verizon Wireless to join this application, as their Special Permit expires on September 14, 2015. It is recommended that the application form be countersigned by each individual wireless carrier or, alternatively, an authorization letter from each carrier be provided.

Chairman Jerome Kerner, AIA

April 15, 2015

Page 2 of 2

2. In speaking with the Building Department, it is our understanding that there is an open Building Permit in connection with the Sprint/Nextel facility (Permit #2011-0132); it is recommended that this permit be closed prior to the Board taking action on the Special Permit renewal.
3. The applicant must provide an updated letter from a professional engineer certifying that the facility is currently in compliance with the Planning Board's approving resolution, approved plans and Section 220-41.1 of the Zoning Code (this applies to the tower and all wireless carriers that are subject to the renewal).
4. On behalf of the Planning Board, the applicant should prepare and submit Part 2 of the Short EAF for review.
5. The applicant should contact this office to coordinate a site inspection.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**Plan Reviewed, prepared by Apt Engineering and dated (last revised) February 16, 2015:**

- Record Drawing (AB-1)

**Documents Reviewed:**

- Letter from Snyder & Snyder, LLP, dated March 23, 2015
- Step II: Application for Special Permit Use Approval
- Short Environmental Assessment Form, dated March 23, 2015
- Antenna Site FCC RF Compliance Assessment and Report, prepared by Pinnacle Telecom Group, dated February 3, 2015
- Structural Analysis Report, prepared by Bennett & Pless, dated March 20, 2015
- Project Certifications Report, prepared by All-Points Technology Corporation, P.C., dated January 27, 2011

JKJ/JMC/dc

**0-2 LIVING**

**CAL# 11-13PB**

Application No.: 12-15 WP  
Fee: \_\_\_\_\_ Date: \_\_\_\_\_

TOWN OF LEWISBORO  
WETLAND PERMIT APPLICATION

Town Offices @ Orchard Square, Suite L (Lower Level), 20 North Salem Road, Cross River, NY 10518  
Phone: (914) 763-5592  
Fax: (914) 763-3637  
[planning@lewisborogov.com](mailto:planning@lewisborogov.com)

**Project Information**

Project Address: 02 Living Realty Group, \_\_\_\_\_  
Sheet: 18 Block: 10533 Lot(s): 24 & 25

Project Description (identify the improvements proposed within the wetland/wetland buffer and the approximate amount of wetland/wetland buffer disturbance): provide 2 handicap accessible parking spaces with a landing zone approx 400 square feet.

**Owner's Information**

Owner's Name: Rosemary Devlin Phone: 914-763-6320  
Owner's Address: 792 Rt 35, Cross River 10533 Email: rosedev2@aol.com

**Applicant's Information** (if different)

Applicant's Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Applicant's Address: \_\_\_\_\_ Email: \_\_\_\_\_

**Authorized Agent's Information** (if applicable)

Agent's Name: N/A Phone: \_\_\_\_\_  
Agent's Address: \_\_\_\_\_ Email: \_\_\_\_\_

**To Be Completed By Owner/Applicant**

1. What type of Wetland Permit is required? (see §217-5C and §217-5D of the Town Code)  
 Administrative  Planning Board
2. Is the project located within the NYCDEP Watershed?  Yes  No
3. Total area of proposed disturbance:  < 5,000 s.f.  5,000 s.f. - < 1 acre  ≥ 1 acre
4. Does the proposed action require any other permits/approvals from other agencies/departments? (Planning Board, Town Board, Zoning Board of Appeals, Building Department, Town Highway, ACARC, NYSDEC, NYCDEP, WCDOH, NYSDOT, etc): Identify all other permits/approvals required: Planning Board

Note: Initially, all applications shall be submitted with a plan that illustrates the existing conditions and proposed improvements. Said plan must include a line which encircles the total area of proposed land disturbance and the approximate area of disturbance must be calculated (square feet). The Planning Board and/or Town Wetland Inspector may require additional materials, information, reports and plans, as determined necessary, to review and evaluate the proposed action. If the proposed action requires a Planning Board Wetland Permit, the application materials outlined under §217-7 of the Town Code must be submitted, unless waived by the Planning Board. The Planning Board may establish an initial escrow deposit to cover the cost of application/plan review and inspections conducted by the Town's consultants.

For administrative wetland permits, see attached Administrative Wetland Permit Fee Schedule.

Owner/Applicant Signature: Rosemary Devlin Date: 4/2/2015

A N D R E W      W Y N N Y K      A R C H I T E C T

April 2, 2015

Ms. Lisa Pisera  
Town Of Lewisboro Planning Board  
20 North Salem Road  
Cross River, New York 10518

Re: O-2 Living Realty Group LLC  
795 Route 35  
Cross River, New York 10518

Dear Ms. Pisera:

Per follow-up to the above referenced matter before the Planning Board, attached please find original and copies (10 each in total) of the following documents:

Drawings:

Current Topographic Survey of Property  
Revised Site Plan SP-1  
Revised Site Plan Overlay SP-2  
Revised Existing Conditions EX-1  
Revised Existing Conditions EX-2  
Wetland Setbacks W-1  
Aerial Setbacks A-1

Correspondence/Forms:

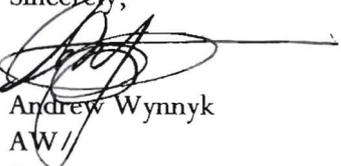
Cover Letter  
Response to Kellard Sessions Memorandum 1/22/14  
Response to MOM Planning Board Meeting of 1/28/15  
(Anticipated) Wetland Application

We trust the attached will be deemed satisfactory in moving the process forward enabling us to be calendared for the forthcoming Planning Board meeting scheduled for April 21, 2015.

Your assistance in this matter is greatly appreciated.

Thank you.

Sincerely,

  
Andrew Wynnyk

AW/

Enc.

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**532 West 30<sup>th</sup> Street, Fifth Floor New York, NY 10001**

Phone 212 982 7708

Fax 212 982 7708

**A N D R E W      W Y N N Y K      A R C H I T E C T**

April 2, 2015

Town Of Lewisboro Planning Board  
20 North Salem Road  
Cross River, New York 10518

Re: O-2 Living Realty Group LLC  
795 Route 35  
Cross River, New York 10518

Dear Members of the Planning Board

Per follow-up to the matter before you, attached please find response(s) per Minutes of Meeting held 1/28/15 referenced per items listed sequentially:

4.) Applicant requests that the board amend this resolution to no longer require land bank parking as per newly developed information found on drawings A-1 and W-1 prepared by Bibbo Associates, wherein it is demonstrated that such land bank parking is deemed infeasible due to its presence wholly or partly within several wetland restrictive areas. When referenced to the originally approved site plan this becomes clear.

5.) The extent of the proposed impervious surface area for the required handicapped accessible parking spaces and its location within various wetland setbacks is indicated on the drawings.

6.) The proposed handicapped parking spaces have been relocated to the previously located loading space per the board's suggestion.

9.) The matter of the existing appurtenances falling within the building's setback was brought to the Building Inspector's attention, the applicant will seek to have a determination made to have these declared existing non-conforming as they pre-date the purchase of the property by the current owner and whose provenance cannot be determined.

10.) Applicant intends to return to the Planning Board after said items have been clarified with the intent of having the public hearing waived.

11.) In view of the newly developed wetland information and upon review and approval of the attached submission by the Planning Board applicant is aware such permit may be necessary.

14.) Clarification of the need for an impervious surface for handicapped parking remains however, based on the newly developed wetland information it appears that such impervious surface maybe permissible within the delineated area.

**A N D R E W      W Y N N Y K      A R C H I T E C T**

April 2, 2015

Jan K. Johannessen  
Town Of Lewisboro Planning Board  
20 North Salem Road  
Cross River, New York 10518

Re: Response to Kellard Sessions Comments in Memorandum of 1-22-14  
O-2 Living Realty Group LLC  
795 Route 35  
Cross River, New York 10518

Dear Jan:

Pursuant to the memorandum in question attached please find responses as requested to items as noted:

- 3.) Based on a re-working of the site plan parking due to newly developed wetland setback information it was feasible to increase the parking by one space as is indicated on the revised site plan drawings.
- 4.) This item no longer applies as the parking has been re-located to the previous loading space location (as suggested by board members during the last meeting).
- 5.) Applicant concurs with this assessment and requests that the board amend this resolution to no longer require land bank parking as per newly developed information found on drawings A-1 and W-1 prepared by Bibbo Associates, wherein it is demonstrated that such land bank parking is deemed infeasible due to its presence wholly or partly within several wetland restrictive areas. When referenced to the originally approved site plan this becomes clear.
- 6.) The second floor use of Building #2 shall be office, the table and floor plans have been adjusted accordingly.
- 7.) This has been done as reflected in the revised drawings.
- 8.) This item has been eliminated due to the infeasibility of maintaining same year-round.
- 9.) The newly developed wetland setback information is presented/referenced in all revised and newly submitted drawings.
- 10.) Limits of disturbance have been illustrated and calculated on the site plan(s).

I trust the above noted responses will be deemed satisfactory enabling the applicant to move forward with the next step in this process.

Your time and attention in this matter are greatly appreciated.

Thank you.

**MEMORANDUM**

TO: Chairman Jerome Kerner, AIA and  
Members of Lewisboro Planning Board

CC: Lisa Pisera  
Judson Siebert, Esq.

FROM: Jan K. Johannessen, AICP  
Joseph M. Cermele, P.E., CFM  
David J. Sessions, RLA, AICP  
Town Consulting Professionals

DATE: April 15, 2015

RE: Yellow Monkey Village (O-2 Living Realty Group, LLC)  
795 Route 35  
Sheet 18, Block 10533, Lot(s) 24 and 25

**Project Description**

The subject property is located on NYS Route 35, consists of  $\pm 0.84$  acres of land and is located within the RB Zoning District/Special Character Overlay District. The subject property, otherwise known as Yellow Monkey Village, is owned by O-2 Living Group, LLC and is developed with three (3) 2-story buildings, a common driveway and a rear gravel parking lot. When originally approved and developed in the 1970's, Yellow Monkey Village was approved for retail use only. Over the years, a variety of uses have been conducted within the various tenant spaces and the applicant is proposing to legalize the existing non-retail related uses.

With the exception of some minor paving and hardscaping improvements to achieve handicap parking accessibility and improve circulation within the parking lot, the proposed action involves no land development or exterior building improvements.

**SEQRA**

The proposed action is a Type II Action and is categorically exempt from the State Environmental Quality Review Act (SEQRA).

### **Required Approvals/Referrals**

1. Site Development Plan Approval is required from the Planning Board; the applicant has requested a Waiver of Site Development Plan Procedures.
2. The proposed action requires a Wetland Activity Permit from the Planning Board; a public hearing is required.
3. The application has been referred to the Westchester County Planning Board in accordance with Section 239-m of the General Municipal Law.

### **Comments**

1. As noted above, Yellow Monkey Village was originally approved for retail use only. While the majority of the tenant spaces are proposed to remain retail, the applicant is proposing to legalize the existing café located on the ground floor of Building #6, the spa located on the ground floor of Building #9, the yoga studio located on the second floor of Buildings #7 and #9, and an office located on the second floor of Building #10.

We note that the parking requirements for the above-mentioned non-retail uses are identical or less restrictive than required for retail (1 space/200 s.f.). Therefore, the proposed change of use will have no impact on the number of parking spaces required/approved. Further, when previously approved, the Planning Board accepted a lesser number of parking spaces than what was required at the time (hence the 48 approved "land-banked" parking stalls mentioned below).

2. We note that the original site plan approval contained a total of 48 "land-banked" parking spaces which are shown to be located over lands owned by the New York City Department of Protection (NYCDEP). Given the ownership, the extent of wetlands in this area, and proximity to the reservoir, it is unlikely that these spaces will ever be constructed. Further, the Planning Board's August 2, 1978 approving resolution required the annual renewal of a lease with the NYCDEP associated with the land-banked parking area; according to the applicant this was never pursued and has lapsed. The applicant has requested that the Planning Board amend its resolution to abandon the land-banked parking area and need for a lease with the NYCDEP. For the above reasons and as the site's parking demand appears satisfied with the number of existing spaces provided, this office has no objection to the applicant's request.
3. Based on prior site walks and our knowledge of the area, this office agrees with the approximate wetland boundary line established by Evans Associates and depicted on the

drawings. Based on the information submitted, while a Town Wetland Activity Permit is required, all proposed land disturbance and proposed impervious cover appears to be located outside of any NYCDEP or New York State Department of Environmental Conservation (NYSDEC) restricted areas.

4. The NYSDEC wetland buffer line and NYCDEP Reservoir Stem setback line should be removed from the submitted survey as they are in consistent with that shown on the site plan.
5. Handicap signage should be specified for the new handicap parking stalls; the notes point to the prior proposed location.
6. The parking island appearing on the drawings does not exist and, based on our understanding, is not proposed. It is recommended that this feature be removed from all drawings. We further recommend converting the two (2) proposed parallel spaces (parking stalls #29 and #30) into three (3) perpendicular spaces. These spaces can be distinguished with concrete wheel stops and, given the one-way traffic pattern, a 25-foot wide (minimum) driveway aisle should be maintained between rows of parking spaces and an 18-foot wide aisle elsewhere throughout the parking lot.
7. The proposed handicap parking stalls shown on Sheet W-1 and Sheet A-1 are not consistent with the site plan and should be removed from the plan.
8. The Town's standard signature blocks for the owner, Planning Board and Town Engineer shall be provided on all sheets; please contact this office for standard language.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**Plans Reviewed, prepared by Andrew Wynnyk Architect:**

- Site Plan (SP-1), dated (last revised) April 2, 2015
- Site Plan Overlay (SP-2), dated (last revised) April 2, 2014
- Existing Conditions (Sheets EX-1 and EX-2), dated (last revised) March 13, 2014

**Plans Reviewed, prepared by Evans Associates and dated March 12, 2015:**

- Wetland Setbacks (W-1)
- Aerial-Setbacks (A-1)

Chairman Jerome Kerner, AIA

April 15, 2015

Page 4 of 4

**Documents Reviewed:**

- Letter from Andrew Wynnyk Architect, dated April 2, 2015
- Wetland Permit Application
- Topographic Survey, prepared by Lind Lank Surveyors, P.C.

JKJ/JMC/DJS/dc

T:\Lewisboro\Correspondence\LW2082JJ-LWPB-YellowMonkeyVillage-Review-Memo-4-15-15.docx

**JAMES SANDLER**

**Cal# 4-14WV**

**Cal# 69-14WP**

**STALZER DESIGN, LLC**  
Timeless Design • Relaxed Elegance

March 24, 2015

Town of Lewisboro Planning Board  
Attention: Jerome Kerner, Chairman  
P.O. Box 725  
Cross River, NY 10518

**RE: Sandler Residence**  
**28 Lake Street**  
**Goldens Bridge, New York**

Jerome Kerner,

I am informing you of a devastating fire that occurred at 28 Lake Street on February 27, 2015. During the event, every window in the house was destroyed, 90% of the finishes were removed, plumbing/electrical services melted and some structural damage is beyond repair.

The owner's intent is to rebuild the residence as-is with minor modifications. The reconstruction is intended to address the existing Building Department and Wetlands Department violations. We will present the construction documents for your review and comment as soon as they're ready.

Respectfully submitted.



Thomas Stalzer  
Stalzer Design LLC

# **TOWN BOARD REFERRALS**

LOCAL LAW NUMBER \_\_-2015 OF THE TOWN OF LEWISBORO

SECTION 1: TITLE

This Local Law shall be known as 2015 amendment of Section 220-2(B), enactment of Sections 220-23(A)(19), 220-24(A)(1)(f), 220-24(B)(1)(d), 220-24(C)(1)(o), 220-24(D)(1)(i), and enactment of Section 220-43.4 of Chapter 220: Zoning.

SECTION 2: ADOPTION

Now therefore be it enacted by the Town Board of the Town of Lewisboro Local Law \_\_-2015 that this law shall take effect immediately upon its passage:

SECTION 3:

Section 220-2(B) of Chapter 220: Zoning, is hereby amended to add the definition of bed and breakfast establishments to read as follows:

**§220-2. Definitions and word usage.**

- B. For the purposes of this chapter only, certain words and terms used herein are defined as follows:

BED AND BREAKFAST ESTABLISHMENTS -- An owner occupied dwelling in which no more than three bedrooms are available as overnight accommodations for paying, transient guests to whom a morning meal may be served.

SECTION 4:

Section 220-23(A)(19) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-23. Schedule of regulations for residential districts.**

- A. Permitted principal uses in R-4A, R-2A, R-1A, R-1/2A and R-1/4A Districts are as follows:

(19) \*Bed and breakfast establishments.

SECTION 5:

Section 220-24(A)(1)(f) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

A. Permitted uses in CC-20 Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter. Permitted principal uses are as follows:

- (f) Bed and breakfast establishments in existing residential buildings used for residential purposes, in accordance with §220-43.4.

SECTION 6:

Section 220-24(B)(1)(d) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

B. Permitted uses in SU Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter or as may be approved by the Planning Board as part of site development plan review. Permitted principal uses are as follows:

- (d) Bed and breakfast establishments in existing residential buildings used for residential purposes, in accordance with §220-43.4.

SECTION 7:

Section 220-24(C)(1)(o) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

C. Permitted uses in RB Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter. Permitted principal uses are as follows:

- (o) Bed and breakfast establishments in existing residential buildings used for residential purposes, in accordance with §220-43.4.

SECTION 8:

Section 220-24(D)(1)(i) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

D. Permitted uses in GB Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter. Permitted principal uses are as follows:
  - (i) Bed and breakfast establishments in existing residential buildings used for residential purposes, in accordance with §220-43.4.

SECTION 9:

Section 220-43.4 of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-43.4. Bed and Breakfast establishments.**

- A. Purpose. It is the specific purpose and intent of this provision to address the need of residents to locate convenient accommodation for visitors, to provide local accommodation for short-term visitors to the community, to encourage preservation of large older dwellings by providing a cost-effective alternate or adaptive use that can relieve the maintenance burden on the owners of such buildings and to encourage the preservation of large residential lots and their open space character by permitting an alternative use consistent with the residential character of the community. Furthermore, it is the purpose and intent of this provision to provide economic support for present resident families, to protect and preserve property values, to ensure healthy and safe living conditions and to have more effective regulation and control of Town growth and development. In furtherance of these purposes, specific conditions are set forth herein for bed and breakfast establishments.
- B. Bed and breakfast establishments shall be special uses as follows:
  - (1) In addition to the specific requirements set forth herein, the property and the principal and accessory structures located thereon shall conform to the lot area, yard and other requirements for the zoning district in which the property and structures are located unless a variance therefor shall have been granted by the Board of Appeals.
  - (2) The building housing a bed and breakfast establishment shall be an existing, detached single-family dwelling and its use as a bed and breakfast establishment shall not conflict with its appearance or function as such.
  - (3) The minimum lot size on which a bed and breakfast establishment may be located is two (2) acres. A bed and breakfast establishment may be permitted

on a lot with a smaller area only if such lot is located in a nonresidential district, the Planning Board finds that a bed and breakfast establishment can be adequately accommodated within the existing principal dwelling building, that it will not overburden the property, and that it will be a use compatible with the surrounding properties.

- (4) The owner of the lot upon which the bed and breakfast establishment is to operate shall occupy and maintain the bed and breakfast establishment as his/her primary legal residence. The owner of the lot must reside in the premises at the time rooms are being used by guests.
- (5) The maximum number of bedrooms that may be available to overnight guests shall be three (3) bedrooms. The Planning Board shall be responsible for determining and limiting the number of bedrooms in each dwelling in connection with its review of the special use permit application.
- (6) Guests in such bed and breakfast establishment may reside in such establishment for a maximum of three (3) nights. The maximum occupancy of each guest room in the bed and breakfast establishment shall be two (2) adults and their minor children, as long as such occupancy is in compliance with the New York State Uniform Fire Prevention and Building Code.
- (7) Meal service shall be limited to a morning meal served to overnight guests of the bed and breakfast establishment only.
- (8) There shall be one price per night for overnight guests of the bed and breakfast establishment, which price shall include the morning meal.
- (9) No less than one (1) off-street parking space shall be provided per bedroom designated as available for overnight guests. Said parking shall be in addition to the parking required by this chapter for the single-family dwelling use. The Planning Board shall be responsible in connection with its review of the special use permit application for determining that the required number of parking spaces can be provided in a safe manner on the subject lot so as to not establish a nuisance or burden for adjacent and surrounding lots.
- (10) Evidence of the approval of the proposed method and adequacy of water supply and sewage disposal shall be obtained from the Westchester County Department of Health.
- (11) The special use permit shall be granted for a period of three (3) years and may be renewed for additional three (3) year periods. An application, and a renewal, of the special use permit shall be made to the Building Department on a form provided by the Building Department for such purpose, and by payment of a fee in an amount set forth in a Fee Schedule as adopted and as may be amended from time to time by resolution of the Town Board. The

Building Department, after receiving the completed application and fee, shall reissue the special use permit if inspection of the premises finds it to be in compliance with all applicable codes including the New York State Uniform Fire Prevention and Building Code, the requirements of this section and the provisions of the original special use permit approval. If the Building Department finds that the property is not in compliance with all applicable codes including the New York State Uniform Fire Prevention and Building Code, the requirements of this section and the provisions of the original special use permit approval, then the Building Department shall refer the application to the Planning Board for action.

- (12) Each property for which a special permit has been issued for use as a bed and breakfast establishment is subject to periodic inspections by the Building Department and Fire Inspector to ensure continued compliance with all applicable codes including the New York State Uniform Fire Prevention and Building Code, the requirements of this section and the provisions of the original special use permit approval. Such inspections shall be conducted at least annually, and may be conducted more frequently if the Building Department or Fire Inspector reasonably suspects that more frequent inspections are necessary to ensure the safety of the bed and breakfast establishment.
- (13) If any inspection of the property and dwelling by the Building Department or Fire Inspector for the purpose of ensuring compliance with the provisions of this section is refused by the owner, when said inspection occurs at any reasonable time during daylight hours, or if the continuing conditions of the special use permit are violated, the special permit shall be subject to revocation after a hearing by the Planning Board at which the permit holder is provided an opportunity to be heard.
- (14) When during the review of an application the Planning Board finds that significant site work will be required to increase parking areas, to enlarge subsurface sewage disposal areas or to otherwise alter the physical site conditions, the Planning Board shall require the submission of a site plan which shall be processed concurrently with the application for a special use permit. In all other situations, site plan approval by the Planning Board shall not be required.
- (15) In addition to the special standards described above, bed and breakfast establishments shall comply with any other requirements of this chapter and any special requirements deemed appropriate by the approving agency in accordance with the requirements of Section 220-32 herein.

## SECTION 10: HOME RULE

Nothing in this Local Law is intended, or shall be construed (a) to limit the home rule authority of the Town under State Law to limit the Town's discretion in setting fees and charges in connection with any applications requiring Town approval.

SECTION 11: SEVERABILITY

If any part or provision of this Local Law or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part of provision or application directly involved in the controversy in which judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law or the application thereof to other persons or circumstances, and the Town of Lewisboro hereby declares that it would have passed this Local Law or the remainder thereof had such invalid application or invalid provision been apparent.

SECTION 12: EFFECTIVE DATE

This Local Law shall take effect immediately upon filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

Dated: \_\_\_\_\_, 2015

BY THE ORDER OF THE TOWN BOARD  
OF THE TOWN OF LEWISBORO

JANET DONOHUE, TOWN CLERK

LOCAL LAW NUMBER \_\_-2015 OF THE TOWN OF LEWISBORO

SECTION 1: TITLE

This Local Law shall be known as 2015 amendment of Section 220-2(B) of Chapter 220: Zoning.

SECTION 2: ADOPTION

Now therefore be it enacted by the Town Board of the Town of Lewisboro Local Law \_\_-2015 that this law shall take effect immediately upon its passage:

SECTION 3:

Section 220-2(B) of Chapter 220: Zoning, is hereby amended to delete the definition of motel as follows:

The Definition of "MOTEL" is hereby deleted from Section 220-2(B) of chapter 220: Zoning, of the Town Code of the Town of Lewisboro.

SECTION 4: HOME RULE

Nothing in this Local Law is intended, or shall be construed (a) to limit the home rule authority of the Town under State Law to limit the Town's discretion in setting fees and charges in connection with any applications requiring Town approval.

SECTION 5: SEVERABILITY

If any part or provision of this Local Law or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part of provision or application directly involved in the controversy in which judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law or the application thereof to other persons or circumstances, and the Town of Lewisboro hereby declares that it would have passed this Local Law or the remainder thereof had such invalid application or invalid provision been apparent.

SECTION 6: EFFECTIVE DATE

This Local Law shall take effect immediately upon filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

Dated: \_\_\_\_\_, 2015

BY THE ORDER OF THE TOWN BOARD  
OF THE TOWN OF LEWISBORO

JANET DONOHUE, TOWN CLERK

LOCAL LAW NUMBER \_\_-2015 OF THE TOWN OF LEWISBORO

SECTION 1: TITLE

This Local Law shall be known as 2015 Amendment of Section 220-2(B), enactment of Section 220-23(A)(18), enactment of Sections 220-23(A)(18), 220-24(A)(1)(e), 220-24(B)(1)(c), 220-24(C)(1)(n), 220-24(D)(1)(h), and Section 220-43.3 of Chapter 220: Zoning.

SECTION 2: ADOPTION

Now therefore be it enacted by the Town Board of the Town of Lewisboro Local Law \_\_-2015 that this law shall take effect immediately upon its passage:

SECTION 3:

Section 220-2(B) of Chapter 220: Zoning, is hereby amended to add "Inn" to the definition of "Hotel," to read as follows:

HOTEL / INN – A building or portion thereof containing rooms, without individual kitchen facilities, occupied by transient guests who are lodged with or without meals, which rooms have primary access from public halls, and in which building or portion thereof there are certain public rooms or halls for the service of food and drink, with or without entertainment, and other facilities intended to provide customary accessory conveniences or services normally incidental to and associated with such a use. For purposes of this chapter, the term "Hotel" shall also include "Inns."

SECTION 4:

Section 220-23(A)(18) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-23. Schedule of regulations for residential districts.**

- A. Permitted principal uses in R-4A, R-2A, R-1A, R-1/2A and R-1/4A Districts are as follows:

(18) \*Hotels.

SECTION 5:

Section 220-24(A)(1)(e) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

A. Permitted uses in CC-20 Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter. Permitted principal uses are as follows:

- (e) Hotels in accordance with §220-43.3.

SECTION 6:

Section 220-24(B)(1)(c) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

B. Permitted uses in SU Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter or as may be approved by the Planning Board as part of site development plan review. Permitted principal uses are as follows:

- (c) Hotels in accordance with §220-43.3.

SECTION 7:

Section 220-24(C)(1)(n) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

C. Permitted uses in RB Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter. Permitted principal uses are as follows:

- (n) Hotels in accordance with §220-43.3.

SECTION 8:

Section 220-24(D)(1)(h) of Chapter 220: Zoning, is hereby enacted to read as follows:

**§220-24. Schedule of regulations for nonresidential districts.**

D. Permitted uses in GB Districts.

1. Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter. Permitted principal uses are as follows:

- (h) Hotels in accordance with §220-43.3.

SECTION 9:

**§220-43.3. Hotels**

Hotels shall be special uses as follows:

- A. Location. The special use listed in this section may be permitted in a residence district only in locations fronting on or having direct access to major or collector roads as determined by the Planning Board and shown on the Town Development Plan Map.
- B. Coverage. Building coverage, including accessory buildings, shall not exceed 20% of the lot area, nor shall the sum total of the land covered with buildings and parking, including driveways, exceed 50% of the lot area, within any residence district.
- C. Setbacks. All new buildings shall be set back from adjoining properties in residence districts and street lines directly opposite properties in residence districts a distance equal to at least twice the normally applicable front yard setback requirement for detached one-family dwellings in the zoning district in which they are located, but in no case less than 50 feet. Setback requirements may be modified by the Board of Appeals in case of conversions of existing buildings.
- D. Buffer area. A landscaped buffer area, meeting at least the minimum requirements of Section 220-15 of this chapter, shall be required along all lot lines adjoining properties in residence districts, except where determined by the approving agency that a lesser width or no buffer will meet the purpose of this requirement.
- E. Parking. Parking shall be in accordance with Section 220-56(D) of this chapter.
- F. Other requirements. In addition to the special standards described above, hotels shall comply with any other requirements of this chapter and any special requirements deemed appropriate by the approving agency in accordance with the requirements of Section 220-32 herein. Further, hotels shall be subject to review

and recommendation by the Architecture and Community Appearance Review Council.

#### SECTION 10: HOME RULE

Nothing in this Local Law is intended, or shall be construed (a) to limit the home rule authority of the Town under State Law to limit the Town's discretion in setting fees and charges in connection with any applications requiring Town approval.

#### SECTION 11: SEVERABILITY

If any part or provision of this Local Law or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part of provision or application directly involved in the controversy in which judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law or the application thereof to other persons or circumstances, and the Town of Lewisboro hereby declares that it would have passed this Local Law or the remainder thereof had such invalid application or invalid provision been apparent.

#### SECTION 12: EFFECTIVE DATE

This Local Law shall take effect immediately upon filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

Dated: \_\_\_\_\_, 2015

BY THE ORDER OF THE TOWN BOARD  
OF THE TOWN OF LEWISBORO

JANET DONOHUE, TOWN CLERK

TOWN OF LEWISBORO

LOCAL LAW NUMBER \_\_-2015 OF THE TOWN OF LEWISBORO

AMENDMENT TO CHAPTER 220, SECTIONS 220-2, 220-24, AND 220-26 OF THE  
LEWISBORO TOWN CODE

BE IT ENACTED by the Town Board of the Town of Lewisboro, Westchester  
County, New York, as follows:

**Section 1.** Chapter 220, Section 220-2(B), entitled “Definitions and word usage,”  
is hereby amended to add the following definition to read as follows:

**§ 220-2. Definitions and word usage.**

B. For the purposes of this chapter only, certain words and terms used herein are defined  
as follows:

**AFFORDABLE AFFIRMATIVELY FURTHERING FAIR HOUSING (AFFH) UNIT –**  
A for-purchase housing unit that is affordable to a household whose income does not  
exceed 80% of the area median income (AMI) for Westchester as defined annually by the  
U.S. Department of Housing and Urban Development (HUD) and for which the annual  
housing cost of a unit including common charges, principal, interest, taxes and insurance  
(PITI) does not exceed 33% of 80% AMI, adjusted for family size ~~and that is marketed in  
accordance with the Westchester County Fair & Affordable Housing Affirmative  
Marketing Plan.~~ A rental unit that is affordable to a household whose income does not  
exceed 60% AMI and for which the annual housing cost of the unit, defined as rent plus  
any tenant paid utilities, does not exceed 30% of 60% AMI adjusted for family size ~~and  
that is marketed in accordance with the Westchester County Fair & Affordable Housing  
Affirmative Marketing Plan.~~

**Section 2.** Chapter 220, Subsections A(1), B(1), C(1), and D(1) of Section 220-24, entitled “Schedule of regulations for nonresidential districts,” is hereby amended to read as follows:

**§ 220-24. Schedule of regulations for nonresidential districts.**

A. Permitted uses in CC-20 Districts.

(1) Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter.

Permitted principal uses are as follows:

(a) Any principal use, including special permit uses, permitted in the R-4A District as regulated therein.

(b) Multifamily dwellings, subject to the requirements of §220-26 of this chapter excluding subsections B(5) and D therein.

(c) Separate dwelling unit or units on floors above any permitted principal nonresidential use if separated by un-pierced fire walls and ceilings and provided with an exterior entrance separate from the nonresidential use.

(d) Office buildings for business, governmental or professional use.

(e) \*Research laboratories.

(f) \*Manufacturing, fabricating, finishing or assembling or products.

**NOTE:** \* Indicates special permit uses subject to special permit review and approval procedures in § 220-32 and to requirements specified in Article V.

B. Permitted uses in SU Districts.

(1) Permitted principal uses. All uses must be conducted from fully enclosed structures except as may be otherwise expressly provided in this chapter or as may be approved by the Planning Board as part of site development plan review.

Permitted principal uses are as follows:

(a) Any principal use, including special permit uses, permitted in the R-4A District as regulated therein.

(b) Multifamily dwellings, subject to the requirements of §220-26 of this chapter excluding subsections B(5) and D therein.

(c) Any facility required for transmission, treatment or temporary storage of electricity, gas, water, sewage, steam, refuse, cable television, telephone service and telegraph service, except a communication facility as defined in this chapter. Such facilities shall include but not be limited to electric transformers, pumping stations and reservoir structures.

C. Permitted uses in RB Districts.

(1) Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter.

Permitted principal uses are as follows:

(a) Stores and shops for the conduct of retail businesses, but excluding automobile service.

(b) Multifamily dwellings, subject to the requirements of §220-26 of this chapter excluding subsections B(5) and D therein.

(c) Full-service restaurants and taverns, excluding fast-food restaurant establishments and outdoor counter, drive-in or curb service.

(d) Limited-service carry-out restaurants including 10 or fewer seats.

(e) \*Limited-service carry-out restaurants including more than 10 seats.

(f) Grocery stores, food markets, health-food stores and supermarkets.

(g) Personal service businesses, such as but not limited to, hairdressers, shoemakers and tailors, serving the public directly.

(h) Professional, banking, governmental and business offices.

(i) Indoor recreation facilities.

(j) Separate dwelling unit or units on floors above any permitted principal nonresidential use if separated by un-pierced fire walls and ceilings and provided with an exterior entrance separate from the nonresidential use.

- (k) Any principal use, including special permit uses, permitted in the R-2F-10 District as regulated herein.
- (l) \*Laundry, dry-cleaning, furniture stripping/refinishing and photo/printing processing establishments.
- (m) \*Gasoline service stations.
- (n) Child day care, provided that child day care shall at all times comply with any applicable New York State laws and regulations. All child day-care centers, group family day-care homes, family day-care homes and school-age child-care programs shall register with and furnish proof of current New York State approval to the Building Department of the Town of Lewisboro.

**NOTE:** \* Indicates special permit uses subject to special permit review and approval procedures in § 220-32 and to requirements specified in Article V.

D. Permitted uses in GB Districts.

- (1) Permitted principal uses. All uses must be conducted from fully enclosed structures, except as may be otherwise expressly provided in this chapter.

Permitted principal uses are as follows:

- (a) Any principal use, including special use permit uses, permitted in the RB District as regulated therein.
- (b) Multifamily dwellings, subject to the requirements of §220-26 of this chapter excluding subsections B(5) and D therein.
- (c) Separate dwelling unit or units on floors above any permitted principal nonresidential use if separated by un-pierced fire walls and ceilings and provided with an exterior entrance separate from the nonresidential use.
- (d) Sales and service agencies for motor vehicles, provided that any outdoor storage or display of vehicles offered or intended for sale complies with the requirements for accessory outdoor storage or display. Overnight outdoor storage of vehicles awaiting servicing shall be limited to the number of

parking spaces designated for such use on an approved site development plan.

- (e) Landscape nurseries.
- (f) Storage and sale of building materials, provided that any outdoor storage or display complies with the requirements for accessory outdoor storage or display.
- (g) \*Commercial kennels.
- (h) \*Fast-food establishments.
- (i) \*Manufacturing, fabricating, finishing or assembling of products and research laboratories.

**NOTE:** \* Indicates special permit uses subject to special permit review and approval procedures in § 220-32 and to requirements specified in Article V.

**Section 3.** Chapter 220, subsections A, B(1), B(2), B(5), D, E(1) and E(2) of Section 220-26, entitled “R-MF Multifamily residence District,” are hereby amended to read as follows:

**§ 220-26. R-MF Multifamily Residence District.**

- A. Minimum site area. The lot upon which such dwelling units shall be constructed shall have an area of not less than ~~7~~ ~~15~~ acres, except when located within and served by a public water and sewer district of the Town of Lewisboro, in which case the minimum lot area shall be 15,000 square feet.
- B. Development density.
  - (1) The average gross density shall not exceed ~~two~~ ~~two~~ ~~two~~ density units per acre of net lot area. The area of any wetlands, water bodies, watercourses or steeply sloped land, as defined by § 220-21 of this chapter, shall first be identified and multiplied by a factor of 0.75. The resulting number shall then be deducted from the gross total lot area to yield the net total lot area to be used in calculating the maximum allowable development density.

- (2) The Planning Board may authorize an increase in permitted density by not more than ~~50%~~ 40% if the applicant constructs at least 1/3 of the additional density units as middle-income dwelling units ~~and/or affordable affirmatively furthering fair housing (AFFH) units, as defined in this chapter.~~ The Planning Board shall base its determination of the appropriate number of additional density units upon consideration of the location and environmental suitability of the specific site and the proposed development design to accommodate such an increased density.
- (5) The site plan for multifamily dwellings proposed to be constructed on property immediately adjacent to land located in a single-family residence district shall incorporate a density transition area. For purposes of this subsection, the “density transition area” is defined as land in an R-MF district, ~~or a district in which R-MF is a permitted use,~~ located within a prescribed distance of the boundary line between the R-MF district ~~or other district in which R-MF is a permitted use,~~ and a single-family residence district not located along a street right-of-way. The distance shall be equal to ~~fifty percent (50%)~~ of the minimum lot width applicable in the adjacent single-family residence district. Within such an area, the average gross development density shall not exceed two density units per acre of land area. The Planning Board may modify this requirement if existing features or land use reduce the need or substitute for the density transition area.
- D. Open space and recreation area. At least ~~30%~~ 50% of the gross area of the site shall be preserved as permanent open space, free of buildings and parking areas, and shall be landscaped or left in its natural state in accordance with plans

approved by the Planning Board.

- (1) Character. Such areas shall encompass land having meaningful ecological, aesthetic and recreational characteristics, with access, shape, drainage, location, topography and extent of improvements suitable, in the opinion of the Planning Board, for the intended purposes.
  
- (2) Preservation. Permanent preservation of such areas shall be legally assured, to the satisfaction of the Planning Board and the Town Attorney, by the filing of appropriate covenants, deed restrictions, easements or other agreements or the creation of a park district. Except for developments comprised solely of rental units and except where all or parts of such open space areas are deeded to and accepted by the Town of Lewisboro or a recognized conservation organization, ownership of such open space areas shall be divided equally among all property owners within the development, and a property owners association, membership in which shall be mandatory for all owners in the development, shall be incorporated, which association shall be responsible for maintenance, liability insurance and local taxes. Such association shall be empowered to levy assessments against property owners to defray the cost of maintenance, and to acquire liens, where necessary, against property owners for unpaid charges or assessments. In the event that the property owners' association fails to perform the necessary maintenance operations, the Town of Lewisboro shall be authorized to enter on such premises for the purpose of performing such operations and to assess the cost of so doing equally among all affected property owners.
  
- (3) Improvements. Except as provided below, within such common open

space areas, a total of not less than 300 square feet per density unit shall be improved with common recreational facilities, such as swimming pools; tennis, basketball, volleyball and shuffleboard courts; playground equipment, etc., for the use of the residents of the premises and their guests, which facilities shall not be operated for profit. Where the Planning Board determines that a suitable recreation area of adequate size cannot be properly located within a multifamily development, or is otherwise not practical, the Board may require as a condition of approval of any site development plan a payment to the Town of a sum which shall constitute a trust fund to be used by the Town exclusively for neighborhood park, playground or recreation purposes, including the acquisition of property. Such sum shall be determined in accordance with a fee schedule established by resolution of the Town Board, and which shall be filed in the Office of the Town Clerk.

E. Required parking.

(1) Parking spaces shall be provided in number and design according to the provisions of Article VII of this chapter.

~~(2) At least 1/3 of the minimum required parking spaces shall be enclosed within garages or carports, except where the Planning Board determines, in connection with its review of the site development plan, that a lesser number is appropriate. In no case shall more than 2/3 of the minimum required parking spaces be so enclosed.~~

(3) The Planning Board may require, if deemed appropriate, the provision of a suitable screened parking area solely for the storage of boats, motor homes and similar recreational vehicles belonging to inhabitants of the development.

**Section 4.** If any provision of this Local Law is declared illegal, unconstitutional or unenforceable by a court of competent jurisdiction, the remainder of this Local Law shall be declared to have been separately adopted and shall remain in full force and effect.

**Section 5.** This local law shall take effect immediately upon filing in the Office of the Secretary of State of the State of New York.

Dated: \_\_\_\_\_, 2015

BY THE ORDER OF THE TOWN BOARD OF  
THE TOWN OF LEWISBORO

JANET L. DONOHUE, TOWN CLERK