

# Visual Analysis Report

## AMTRAK GUILFORD MOOSE HILL ROAD GUILFORD, CT 06437

---

---

*CHA Project Number: 14957.2001.1101*

*Prepared for:*  
*T-Mobile Northeast LLC*  
*35 Griffin Road*  
*Bloomfield, CT 06002*

*Prepared by:*

**CHA**  
*2139 Silas Deane Highway*  
*Rocky Hill, Connecticut 06067*  
*(860) 257-4557*

June 2010 Rev. 1

---

**TABLE OF CONTENTS**

**1.0 Introduction.....1**

**2.0 Site & Study Area Description.....1**

**3.0 Computer Model Visual Analysis.....1**

**4.0 Visual Receptor Research .....1**

**5.0 Field Visual Analysis.....2**

**6.0 Conclusion .....2**

**7.0 Viewshed Map .....5**

**8.0 Photosims .....7**

## 1.0 INTRODUCTION

CHA conducted a visibility study for the proposed 140'-0" monopole located at Moose Hill Road in Guilford, CT. The purpose of the study was to determine the visual impact, if any, that a proposed 140'-0" monopole would have on the surrounding community within a two mile radius study area. Two techniques were utilized to determine the visual impact within the study area: a computer model using topography and vegetation as constraints to estimate the visual limits, and a field analysis to verify the visual limits determined from the computer model. Research of the study area was also conducted to determine locations of sensitive visual receptors.

## 2.0 SITE AND STUDY AREA DESCRIPTION

The subject parcel is approximately 163 acres. A majority of the parcel is wooded, and there are no residences on the subject parcel. The proposed facility is located in an existing tree clearing in the southwest corner of the property. The base of the tower will be 52' AMSL. The wooded area surrounding the proposed facility will act as a visual buffer to the adjacent residential and wooded parcels.

The topography within the study area consists of hills ranging from 50' AMSL to 150' AMSL. Approximately 3,420 acres, or 42.5%, of the 8,053 acre study area is covered with vegetation. The rolling hills and heavy vegetation in the study area will help screen the facility in the surrounding study area. Watercourses occupy approximately 2,180 acres, or 27.1%, of the study area. There are 10 historical sites, 3 parks/recreational areas, 2 trail systems, 3 schools, 1 church, and 1 cemetery within the study area. There is one state designated scenic road, State Route 146, within the study area.

## 3.0 COMPUTER MODEL VISUAL ANALYSIS

A computer model was developed using a proprietary AutoCAD-based application developed by our Technology Solutions Group to estimate how the surrounding topography and vegetation within a 2 mile radius may obstruct the monopole's visibility. The visibility calculations are completed using digital elevation models (DEM), which are models of the earth's surface represented by a grid of elevations spaced 10 or 30 meters and is based on USGS topography maps. Each point in the DEM is independently tested for visibility based on the surrounding topography developed from the USGS maps. Once all points have been tested, a map is generated showing areas of visibility and areas screened by topography. Knowing which areas are screened by topography will assist in field determining which areas within the study area may have seasonal visibility. Next, vegetation within the study area is added to the map by digitizing it from 2004 aerial photographs. CHA's application utilizes a vegetation outline layer which is assigned the standard 65' height. A new map is generated showing only areas of visibility based on topography and the vegetation constraint. The visible areas on the map based on the surrounding topography and vegetation will be verified during the field visual analysis.

## 4.0 VISUAL RECEPTOR RESEARCH

Research of the surrounding study area was conducted to determine the locations of sensitive visual receptors such as historic sites, historic districts, schools, churches, cemeteries, parks, playgrounds, recreational areas, walking trails, beaches, and scenic roads. Historic sites and districts were determined from the National Register of Historic Places. State parks and walking trail systems were determined from the CTDEP website. Surrounding schools, churches, cemeteries, parks, playgrounds, recreational areas, and beaches were determined from street maps, internet searches, and available mapping from town

websites. Scenic roads were determined from the CTDOT list of designated scenic roads. Inquiries were also made to the Towns of Guilford and Branford to determine if there are any locally designated scenic roads, historic districts or properties, or walking trails within the study area. All of the above sensitive visual receptors were added to the viewshed map.

Scenic lands acquired by the State of Connecticut pursuant to P.A. 445 were researched to determine proximity to the proposed site. Connecticut Heritage Areas pursuant to Public Act No. 09-221 (The Quinebaug and Shetucket Rivers Valley National Heritage Corridor, and The Upper Housatonic Valley National Heritage Area) were also researched to determine possible visual impacts. Neither of these research categories was found to be within the two mile radius study area.

## 5.0 FIELD VISUAL ANALYSIS

On January 21, 2010 a field visual analysis was conducted to verify the sensitive visual receptors and the limit of visibility determined from our research and computer model. Weather conditions were favorable on the date of the visibility study as it was a clear and sunny day with winds between 7 and 8 MPH; therefore, visibility of the balloon from surrounding areas was not affected. In general, the field visibility study was conducted as follows: A 60" diameter red balloon was flown at a height of 140'-0" above existing grade. Once the balloon was flown, CHA completed a field drive of the surrounding area to determine the visibility of the balloon, and thus the proposed tower. Visibility from the sensitive visual receptors was our primary focus so photos were taken from each of these locations. Photos were also taken from major streets, intersections, and residential areas; from key areas where the balloon was visible; and from key areas where it was not visible. The limits of visibility determined from the computer model were field verified and adjusted as needed. Areas of potential seasonal visibility were field determined and marked on the viewshed map. Finally, the number of residences within the seasonal and year round visible areas was determined.

## 6.0 CONCLUSION

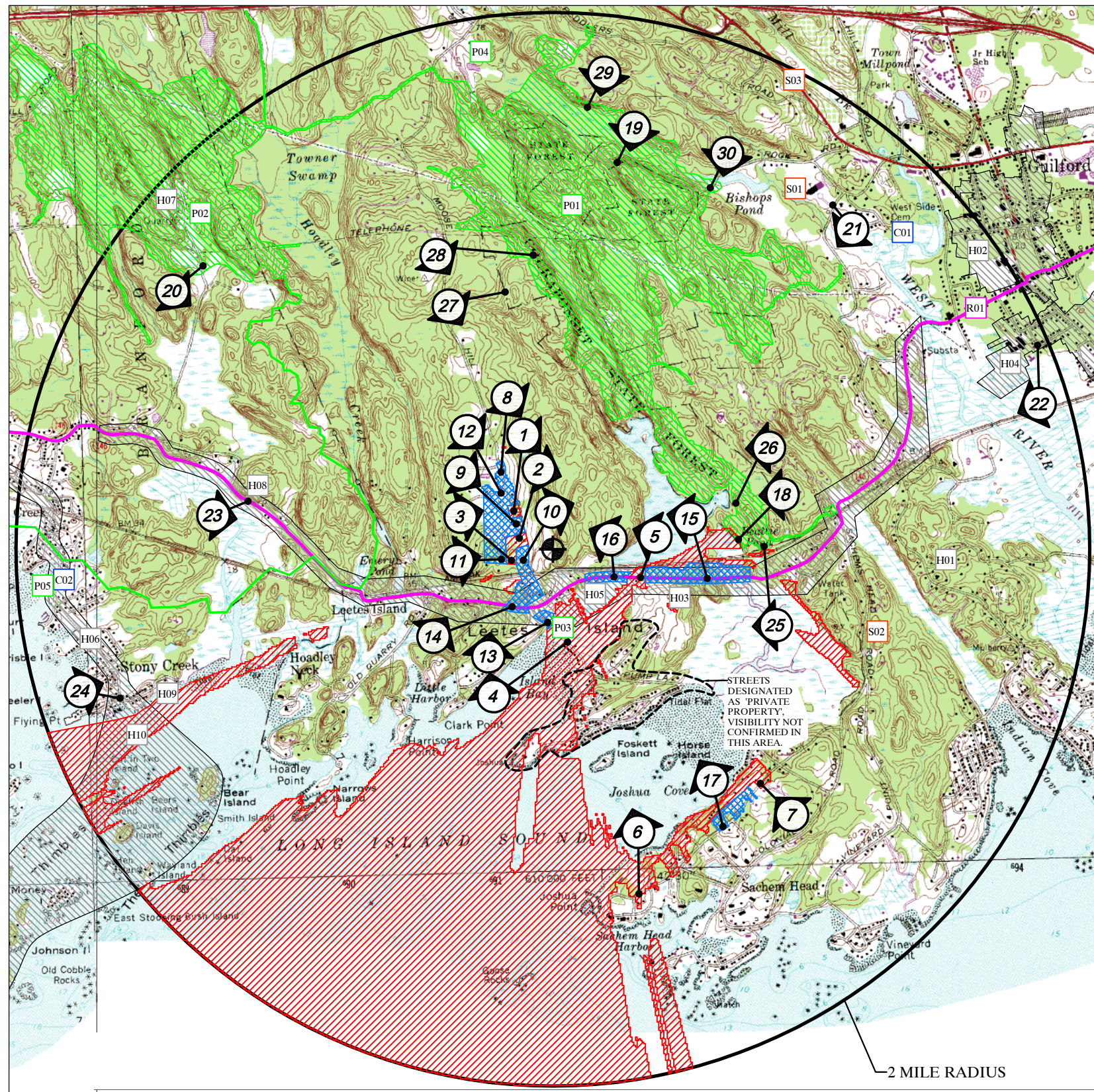
The results of our visual study are summarized in the following documents: Section 7.0: Viewshed Map, and Section 8.0: Photosims. In conclusion, the year round visual impact to the surrounding community within a two mile radius is limited to the red hatched areas on the viewshed map, which is approximately 15.7%, or 1,260.6 acres, of the total study area. The limit of year round visibility includes the area surrounding the following public streets: a 255' and a 265' stretch along Moose Hill Road, a 190' stretch along Dromara Road, a 460' stretch along Leete's Island Road (State Route 146), a 100' and a 375' stretch along Old Sachems Head Road, a 220' and a 585' stretch along Uncas Point Road, a 290' stretch along Uncas Circle, a 1,975' stretch along Shell Beach Road, a 1,025' stretch along Joshua Point Road, a 330' stretch along Rockledge Circle, a 480' stretch along Birch Grove, a 315' stretch along Beach Road, a 300' stretch along Hickory Lane, and a 170' stretch along Juniper Knolls. These areas contain residential properties and will impact the following number of residences: 4 residences along Moose Hill Road, 1 residence along Leetes Island Road (State Route 146), 23 residences along Old Sachems Head Road, 8 residences along Uncas Point Road, 1 residence along Uncas Circle, 14 residences along Shell Beach Road, 8 residences along Joshua Point Road, 8 residences along Rockledge Circle, 10 residences along Birch Grove, 9 residences along Beach Road, 4 residences along Hickory Lane, and 1 residence along Juniper Knolls. The proposed monopole will be seen year round from the following sensitive visual receptors: a 460' stretch along the Route 146 Historic District (State designated scenic roadway), offshore sections of the Stony Creek-Thimble Islands Historic District, a small section of the Westwoods Trails system (white square trail) adjacent to Lost Lake, the Pelatiah Leete House, and Shell Beach.

Immediately outside some of the limits of year round visibility, trees start to screen the proposed monopole giving the potential for seasonal views. The blue hatched areas on the viewshed map indicate the seasonal visual impact determined during leaf off conditions, which is approximately 0.7%, or 58.3 acres, of the total study area. The limit of seasonal visibility includes the area surrounding the following public streets: a 325', 885' and 1140' stretch along Moose Hill Road, a 140', 450' and 470' stretch along Dromara Road, a 440', 740' and 2,060' stretch along Leetes Island Road (State Route 146), a 350' stretch along Sanborn Road, a 150', 240' and 275' stretch along Old Sachems Head Road, and a 370' stretch along Shell Beach Road. Some of these areas contain residential properties and will impact the following number of residences: 11 residences along Moose Hill Road, 7 residences along Dromara Road, 1 residence along Leetes Island Road (State Route 146), 1 residence along Sanborn Road, 3 residences along Old Sachems Head Road, and 1 residence along Arrowhead Drive. The proposed monopole will be seen seasonally from stretches (440', 740', and 2060') along the Route 146 Historic District, which is one of the sensitive visual receptors identified during research of the study area. Route 146 is also a state designated scenic roadway in the study area.

The remainder of the two mile radius study area is screened by topography (2,963.5 acres, 36.8%) and vegetation (3,770.6 Acres, 46.8%). Photos documenting the visible conditions described above have been included in the photo-simulations with their locations marked on the viewshed map.

A majority of the views are close proximity views as they are within the inner two-third miles of the study radius. Fourteen of the eighteen visible views, or 78%, are close proximity views. One of the views, or 6%, is an average distance view as it is within the middle two-third miles of the study radius. The remaining three views, or 16%, are distant views as they are within the outer two-third miles of the study radius. Out of the eighteen visible views, eight (44%) of them are year round and ten (56%) of them are seasonal. Four of the year round views have only the tower tip visible and the remaining four year round views show at least four antenna arrays or more of the tower.

## **7.0 VIEWSHED MAP**



**Historic Sites:**

- H01 Jared Eliot House
- H02 Guilford Historic Town Center
- H03 Pelatiah Leete House
- H04 Whitfield Historic District
- H05 Route 146 Historic District
- H06 Isaac C. Lewis Cottage
- H07 Norcross Brothers Granite Quarry
- H08 John Rogers House
- H09 Stick Style House at Stony Creek
- H10 Stony Creek-Thimble Islands Historic District

**Parks and Trails:**

- P01 Westwoods Trails
- P02 Stony Creek Quarry Preserve Trails
- P03 Shell Beach
- P04 Peddlers Park
- P05 Stony Creek Town Beach

**Schools:**

- S01 A.W. Cox Elementary School
- S02 Community Nursery School Inc.
- S03 KinderCare

**Church/Cemetery:**

- C01 West Side Cemetery
- C02 Church of Christ

**Scenic Roads:**

- R01 State Route 146

**NOTES:**

1. Only visible areas are shown on the map utilizing the process described in note 2. The remainder of the map has been estimated to be nonvisible utilizing the process described in note 3.
2. Seasonal and year round areas of visibility were estimated from a field visual analysis within public R.O.W. and public properties. Areas shown on private property were interpolated from the field visual analysis.
3. Nonvisible areas were estimated from a computer generated topography & vegetation analysis and field verification of vegetation & building screening within public R.O.W and public properties. Vegetation limits were determined from 2004 aerial photos and is assumed to be 65' high. Verification of vegetation height, coverage, and type within private areas not visible from public R.O.W or public properties was not field verified.
4. Historical areas were determined from the National Register of Historic Places
5. Parks, schools, cemeteries, and churches were determined from street maps and field observations.
6. Scenic roads, if any, were determined from the CTDOT list of designated scenic roads and field observations.

**Legend**

<ul style="list-style-type: none"> <li> APPROXIMATE LOCATION OF PROPOSED MONOPOLE</li> <li> APPROXIMATE LIMIT OF SEASONAL TOWER VISIBILITY</li> <li> APPROXIMATE LIMIT OF YEAR ROUND TOWER VISIBILITY</li> <li> CHURCH/CEMETERY</li> <li> PARKS/TRAILS</li> <li> TRAIL</li> <li> HISTORICAL SITE</li> <li> SCENIC ROAD</li> </ul>	<ul style="list-style-type: none"> <li> COMPUTER SIMULATION PHOTOGRAPH LOCATION</li> <li> APPROXIMATE LIMIT OF HISTORIC DISTRICT</li> <li> APPROXIMATE LIMIT OF TRAIL SYSTEM</li> </ul>
---	---

**Visibility by Acreage**

ITEM	APPROXIMATE ACRES	% OF TOTAL AREA
2 MILE RADIUS AREA	8,053	100%
NOT VISIBLE DUE TO TOPOGRAPHY	2,963.5	36.8%
NOT VISIBLE DUE TO VEGETATION	3,770.6	46.8%
VISIBLE YEAR ROUND	1,260.6	15.7%
POTENTIAL SEASONAL VISIBILITY	58.3	0.7%

**Distances from Photo Locations to Tower**

PHOTO	DIST. (FT)	PHOTO	DIST. (FT)	PHOTO	DIST. (FT)	PHOTO	DIST. (FT)
01	1,075	09	875	17	6,401	25	4,150
02	694	10	620	18	3,656	26	3,700
03	842	11	1,030	19	7,713	27	5,150
04	1,849	12	1,503	20	8,856	28	5,800
05	1,809	13	1,441	21	8,728	29	8,720
06	6,987	14	1,386	22	10,343	30	7,760
07	6,156	15	3,089	23	6,069		
08	1,829	16	1,321	24	9,003		

**Visibility by Residence**

STREET	YEAR ROUND TOTAL	SEASONAL TOTAL	STREET	YEAR ROUND TOTAL	SEASONAL TOTAL	STREET	YEAR ROUND TOTAL	SEASONAL TOTAL
Moose Hill Road	4	11	Uncas Circle	1	-	Joshua Point Road*	8	-
Dromara Road	-	7	Arrowhead Drive	-	1	Rockledge Circle*	8	-
Leetes Island Road	1	1	Shell Beach Road (North of Pump Lane)	10	-	Birch Grove*	10	-
Sanborn Road	-	1	Shell Beach Road* (South of Pump Lane)	4	-	Beach Road*	9	-
Old Sachems Head Road	23	3				Hickory Lane*	4	-
Uncas Point Road	8	-				Juniper Knolls*	1	-

\*Streets designated as 'Private Property'. Visibility not confirmed in these areas. Residence counts derived from computer visibility model and aerial imagery.

**2 MILE VIEWSHED ANALYSIS MAP**  
**MOOSE HILL ROAD, GUILFORD, CT**  
**VISUAL IMPACT ASSESSMENT**

PREPARED FOR:

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
 BLOOMFIELD, CT 06002  
 OFFICE: (860)-692-7100

PREPARED BY:

**CHIA**

2139 Silas Deane Highway, Suite 212 - Rocky Hill, CT 06067-2336  
 Mails: (860) 267-4557 - www.chiacompanies.com

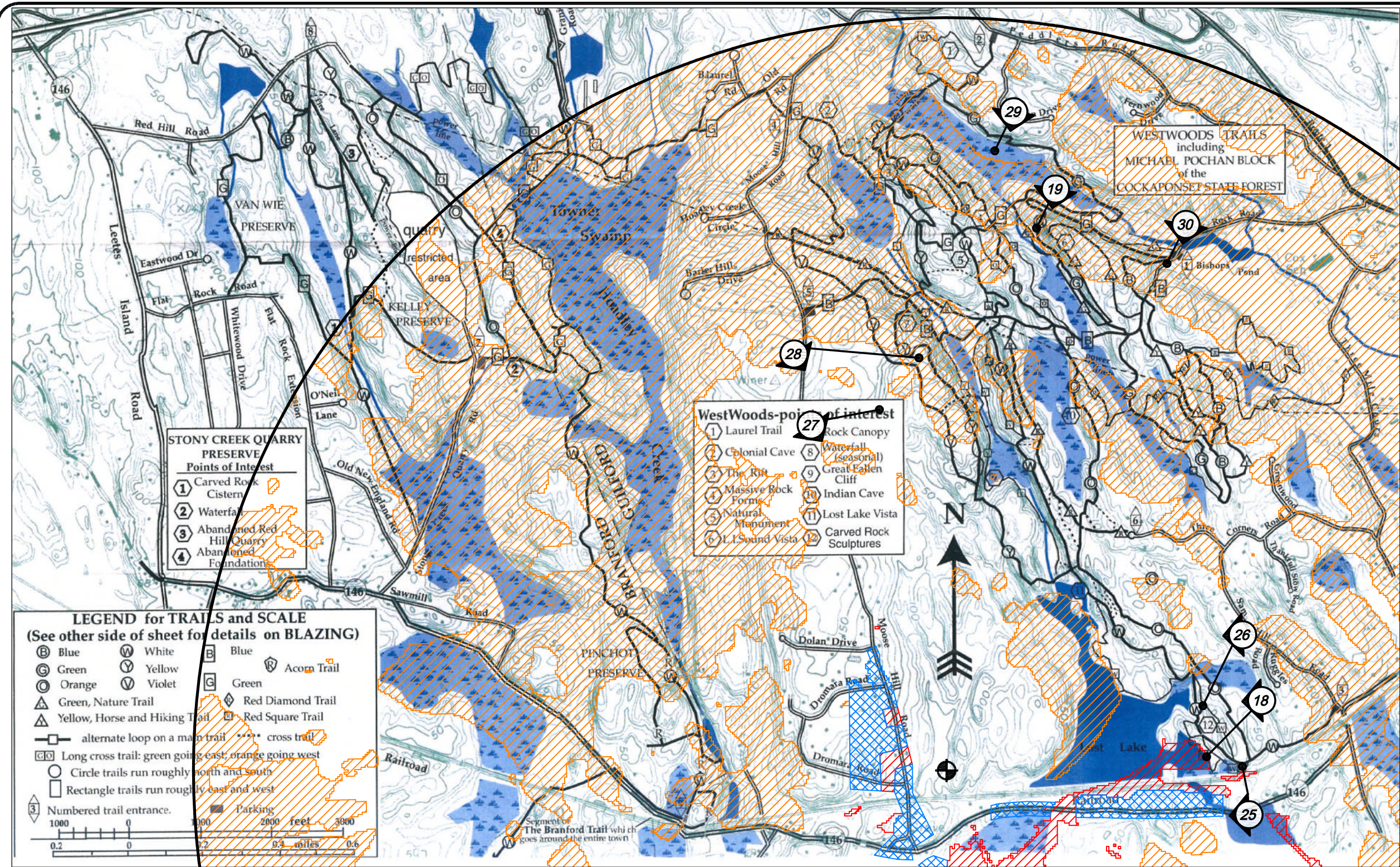
CHA Project No. 14957-2001-1101

JANUARY 2010

0 625' 1250' 2500' 5000'

NORTH

**FIGURE VS-01**



**WESTWOODS POINTS OF INTEREST VISIBILITY SUMMARY:**

1. LAUREL TRAIL: NOT VISIBLE DUE TO VEGETATION
2. COLONIAL CAVE: NOT VISIBLE DUE TO TOPOGRAPHY
3. THE RIFT: NOT VISIBLE DUE TO TOPOGRAPHY
4. MASSIVE ROCK FORMS: NOT VISIBLE DUE TO TOPOGRAPHY
5. NATURAL MONUMENT: NOT VISIBLE DUE TO VEGETATION
6. L.I. SOUND VISTA: NOT VISIBLE DUE TO TOPOGRAPHY
7. ROCK CANOPY: NOT VISIBLE DUE TO TOPOGRAPHY
8. WATERFALL: NOT VISIBLE DUE TO TOPOGRAPHY
9. GREAT FALLEN CLIFF: NOT VISIBLE DUE TO VEGETATION
10. INDIAN CAVE: NOT VISIBLE DUE TO VEGETATION
11. LOST LAKE VISTA: NOT VISIBLE DUE TO VEGETATION
12. CARVED ROCK SCULPTURES: VISIBLE YEAR ROUND TO THE SOUTH AND NOT VISIBLE TO THE NORTH DUE TO VEGETATION

- STONY CREEK QUARRY PRESERVE Points of Interest**
- 1 Carved Rock Cistern
  - 2 Waterfall
  - 3 Abandoned Red Hill Quarry
  - 4 Abandoned Foundations

- WestWoods-points of interest**
- 1 Laurel Trail
  - 2 Colonial Cave
  - 3 The Rift
  - 4 Massive Rock Forms
  - 5 Natural Monument
  - 6 L.I. Sound Vista
  - 7 Rock Canopy
  - 8 Waterfall (seasonal)
  - 9 Great Fallen Cliff
  - 10 Indian Cave
  - 11 Lost Lake Vista
  - 12 Carved Rock Sculptures

**LEGEND for TRAILS and SCALE**  
(See other side of sheet for details on BLAZING)

- Blue
- Green
- Orange
- Green, Nature Trail
- Yellow, Horse and Hiking Trail
- alternate loop on a main trail
- Long cross trail: green going east, orange going west
- Circle trails run roughly north and south
- Rectangle trails run roughly east and west
- Numbered trail entrance.
- White
- Yellow
- Violet
- Acorn Trail
- Red Diamond Trail
- Red Square Trail
- cross trail
- Parking

Scale: 0 to 3000 feet / 0 to 0.6 miles

*Westwoods Visibility by Acres*

ITEM	ACRES	% OF TOTAL AREA
WESTWOODS TOTAL AREA	825	100%
NOT VISIBLE DUE TO TOPOGRAPHY	425.6	51.6%
NOT VISIBLE DUE TO VEGETATION	397.1	48.1%
VISIBLE YEAR ROUND	2.3	0.3%

*Legend*

- APPROXIMATE LOCATION OF PROPOSED MONOPOLE
- COMPUTER SIMULATION PHOTOGRAPH LOCATION
- APPROXIMATE LIMIT OF SEASONAL TOWER VISIBILITY
- APPROXIMATE LIMIT OF YEAR ROUND TOWER VISIBILITY
- LIMIT OF AREA NOT VISIBLE DUE TO TOPOGRAPHY

PREPARED FOR:  
**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002  
OFFICE: (860)-692-7100

PREPARED BY:  
Drawing Copyright © 2010  
**CHIA**  
2130 Silas Deane Highway, Suite 212 - Rocky Hill, CT 06067-2336  
Main: (860) 267-4557 - www.chia.com  
CHA Project No. 14957-2001-1101

**WESTWOODS TRAIL VIEWSHED ANALYSIS MAP**  
*MOOSE HILL ROAD, GUILFORD, CT*  
*VISUAL IMPACT ASSESSMENT*

JUNE 2010

0 750' 1500' 3000'

NORTH

FIGURE VS-02



## **8.0 PHOTOSIMS**



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 1 - EXISTING VIEW FROM  
MOOSE HILL ROAD LOOKING  
SOUTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 1 - PROPOSED VIEW FROM  
MOOSE HILL ROAD LOOKING  
SOUTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 2 - EXISTING VIEW FROM  
MOOSE HILL ROAD LOOKING EAST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 2 - PROPOSED VIEW FROM  
MOOSE HILL ROAD LOOKING EAST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 3 - EXISTING VIEW FROM  
DROMARA ROAD LOOKING EAST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 3 - PROPOSED VIEW FROM  
DROMARA ROAD LOOKING EAST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 4 - EXISTING VIEW FROM  
SHELL BEACH ROAD LOOKING NORTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 4 - PROPOSED VIEW FROM  
SHELL BEACH ROAD LOOKING NORTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 5 - EXISTING VIEW FROM  
LEETES ISLAND ROAD LOOKING WEST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



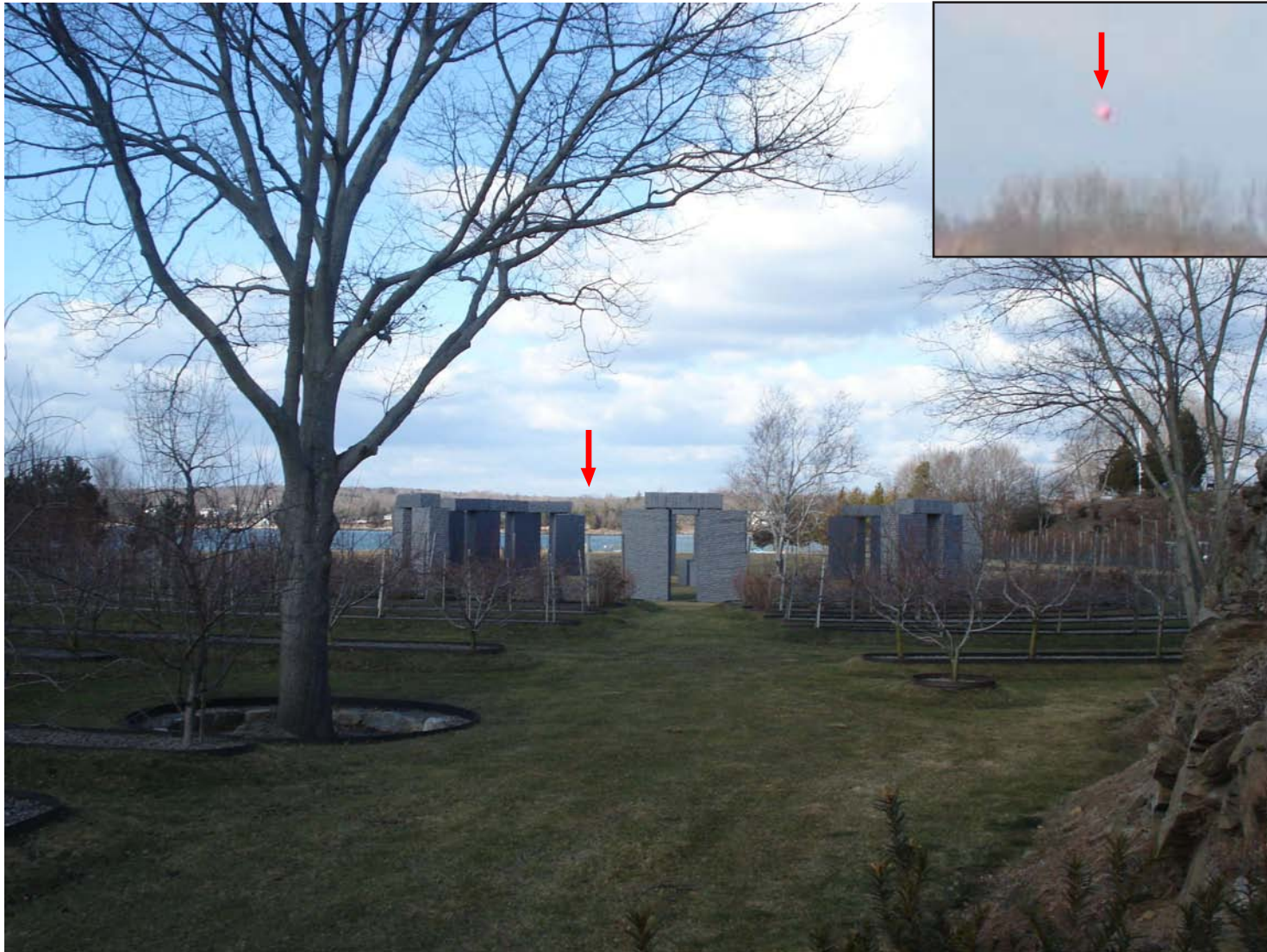
VIEW 5 - PROPOSED VIEW FROM  
LEETES ISLAND ROAD LOOKING WEST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



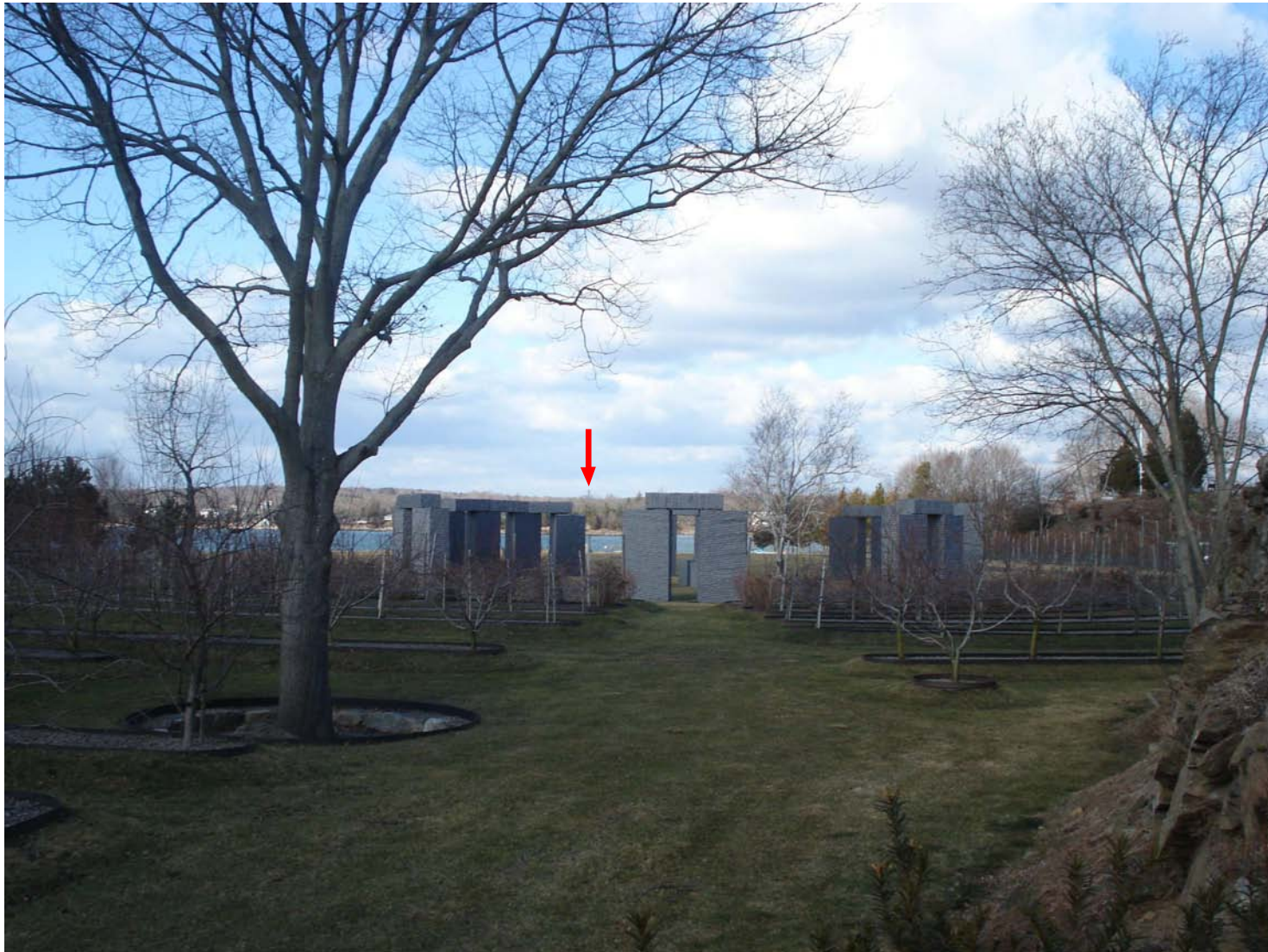
VIEW 6 - EXISTING VIEW FROM  
UNCAS POINT ROAD LOOKING NORTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 6 - PROPOSED VIEW FROM  
UNCAS POINT ROAD LOOKING NORTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 7 - EXISTING VIEW FROM  
OLD SACHEMS HEAD ROAD LOOKING  
NORTHWEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 7 - PROPOSED VIEW FROM  
OLD SACHEMS HEAD ROAD LOOKING  
NORTHWEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 8 - EXISTING VIEW FROM  
MOOSE HILL ROAD LOOKING  
SOUTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 8 - PROPOSED VIEW FROM  
MOOSE HILL ROAD LOOKING  
SOUTHEAST TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 9 - EXISTING VIEW FROM  
MOOSE HILL ROAD LOOKING  
SOUTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 9 - PROPOSED VIEW FROM  
MOOSE HILL ROAD LOOKING  
SOUTHEAST TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 10 - EXISTING VIEW FROM  
MOOSE HILL ROAD LOOKING  
NORTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 10 - PROPOSED VIEW FROM  
MOOSE HILL ROAD LOOKING  
NORTHEAST TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 11 - EXISTING VIEW FROM  
DROMARA ROAD LOOKING EAST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 11 - PROPOSED VIEW FROM  
DROMARA ROAD LOOKING EAST  
TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 12 - EXISTING VIEW FROM  
DROMARA ROAD LOOKING  
SOUTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 12 - PROPOSED VIEW FROM  
DROMARA ROAD LOOKING  
SOUTHEAST TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 13 - EXISTING VIEW FROM  
SHELL BEACH ROAD LOOKING NORTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 13 - PROPOSED VIEW FROM  
SHELL BEACH ROAD LOOKING NORTH  
TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 14 - EXISTING VIEW FROM  
LEETES ISLAND ROAD LOOKING  
NORTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 14 - PROPOSED VIEW FROM  
LEETES ISLAND ROAD LOOKING  
NORTHEAST TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 15 - EXISTING VIEW FROM  
LEETES ISLAND ROAD LOOKING WEST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 15 - PROPOSED VIEW FROM  
LEETES ISLAND ROAD LOOKING WEST  
TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 16 - EXISTING VIEW FROM  
LEETES ISLAND ROAD LOOKING WEST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 16 - PROPOSED VIEW FROM  
LEETES ISLAND ROAD LOOKING WEST  
TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 17 - EXISTING VIEW FROM  
OLD SACHEMS HEAD ROAD LOOKING  
NORTHWEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



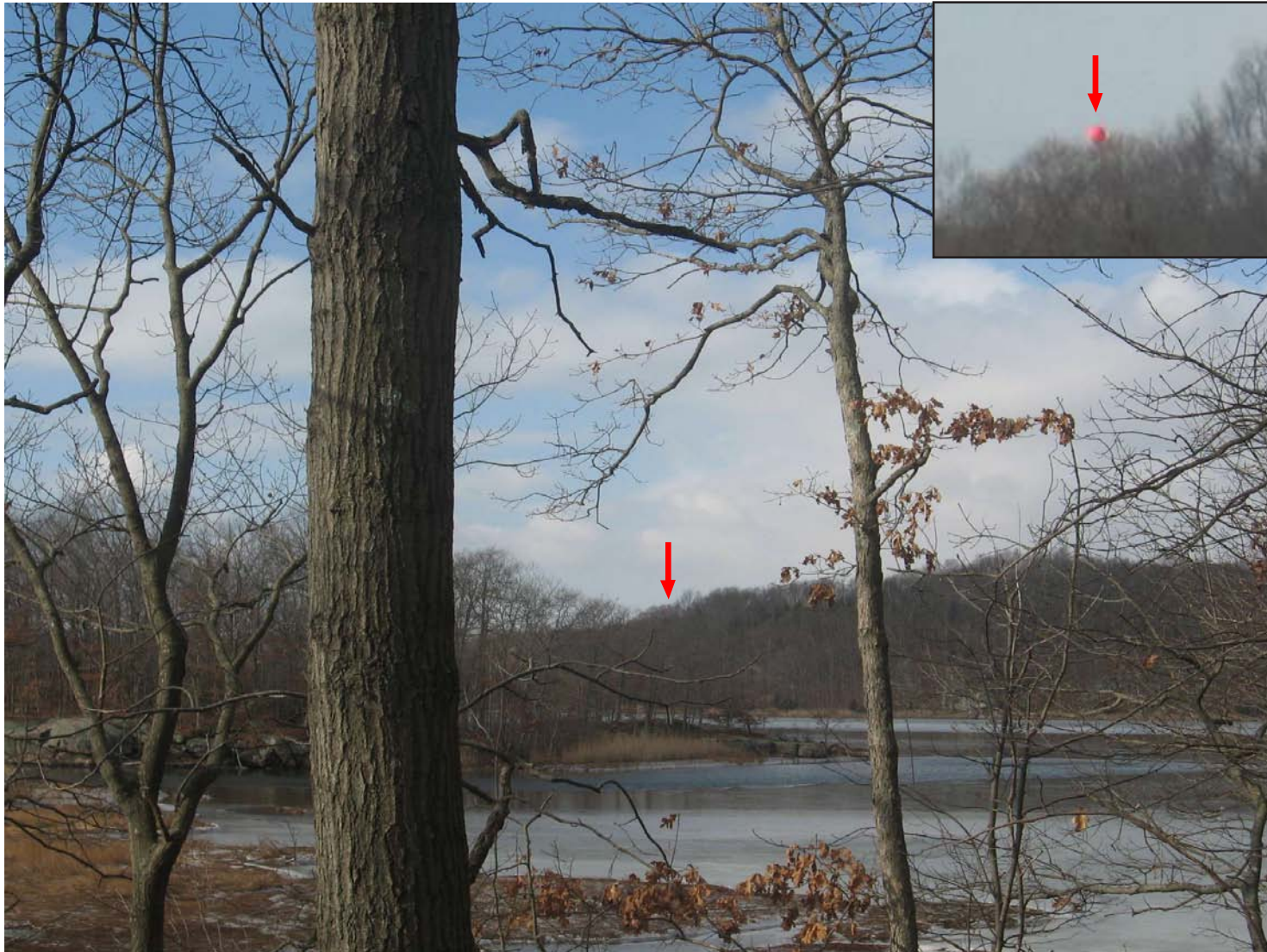
VIEW 17 - PROPOSED VIEW FROM  
OLD SACHEMS HEAD ROAD LOOKING  
NORTHWEST TOWARDS SITE  
(SEASONAL VISIBILITY)

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 18 - EXISTING VIEW FROM  
WESTWOODS TRAILS LOOKING  
WEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 18 - PROPOSED VIEW FROM  
WESTWOODS TRAILS LOOKING  
WEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 19 - NON-VISIBLE VIEW  
FROM SCENIC VIEWPOINT ON  
WESTWOODS TRAILS LOOKING SOUTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 20 - NON-VISIBLE VIEW  
FROM QUARRY ROAD LOOKING  
SOUTHEAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 21 - NON-VISIBLE VIEW  
FROM 3 MILE COURSE LOOKING  
SOUTHWEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 22 - NON-VISIBLE VIEW  
FROM NORTON AVENUE LOOKING  
SOUTHWEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 23 - NON-VISIBLE VIEW  
FROM LEETES ISLAND ROAD LOOKING  
EAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 24 - NON-VISIBLE VIEW  
FROM FLYING POINT ROAD LOOKING  
EAST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 25 - NON-VISIBLE VIEW  
FROM WHITE TRAIL NEAR RAILROAD  
LOOKING WEST TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 26 - NON-VISIBLE VIEW  
FROM WHITE TRAIL NEAR CARVED  
ROCK SCULPTURES LOOKING WEST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 27 - NON-VISIBLE VIEW  
FROM BLUE TRAIL LOOKING SOUTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 28 - NON-VISIBLE VIEW  
FROM ROCK CANOPY YELLOW TRAIL  
LOOKING SOUTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 29 - NON-VISIBLE VIEW  
FROM GREEN TRAIL LOOKING SOUTH  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



VIEW 30 - NON-VISIBLE VIEW  
FROM TRAIL NEAR THE END OF DUNK  
ROCK ROAD LOOKING SOUTHWEST  
TOWARDS SITE

**T-MOBILE NORTHEAST LLC**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

DATE: JAN 2010

SITE: AMTRAK  
GUILFORD