## **HAMDEN 8**

208 Kirk Road Hamden, Connecticut

Description of Proposed Cell Site

Cellco Partnership d/b/a Verizon Wireless 99 East River Drive East Hartford, CT 06108

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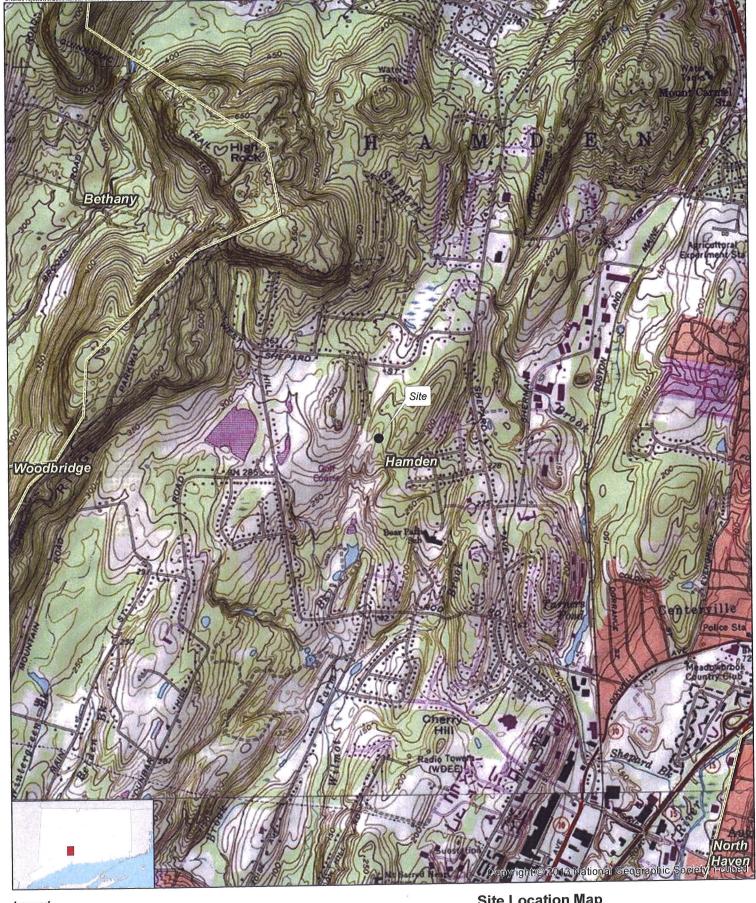
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SITE NAME: HAMDEN 8 – 208 KIRK ROAD, HAMDEN, CT

#### GENERAL CELL SITE DESCRIPTION

The proposed Hamden 8 cell site would be located in the westerly portion of an approximately 9.34 acre parcel owned by the Joseph Vignola and Denise Courtmanche Vignola. The facility would consist of a 160-foot telecommunications tower and a 16' x 11'-6" equipment platform located within a 55' x 50' fenced compound. Cellco will install two (2) equipment cabinets and a diesel-fueled back-up generator on the equipment platform near the base of the tower.

Cellco would attach twelve (12) antennas and six (6) remote radio heads to a low-profile antenna platform at a centerline height of 160 feet above ground level. The top of Cellco's antennas would extend above the top of the tower to an overall height of approximately 163 feet. Vehicular access to the facility compound would extend from Country Club Drive over a 12' wide gravel access drive, extending a distance of approximately 386 feet. Utility service would also extend from Country Club Drive.



#### Legend



Site

Municipal Boundary



### Site Location Map

Proposed Wireless Telecommunications Facility Hamden 8 CT 208 Kirk Road Hamden, Connecticut







#### Legend

Approximate Subject Property Boundary

Approximate Parcel Boundary (CTDEEP GIS)

Proposed Facility Layout

# 200 100 0 200

#### **Aerial Photograph**

Proposed Wireless Telecommunications Facility Hamden 8 CT 208 Kirk Road Hamden, Connecticut





#### SITE EVALUATION REPORT

SITE NAME: HAMDEN 8 – 208 KIRK ROAD, HAMDEN, CT

#### I. TOWER LOCATION

- A. COORDINATES: 41°-23'-43.332" N 72°-55'-52.213" W
- B. GROUND ELEVATION: Approximately 296.5± feet AMSL
- C. U.S.G.S. QUADRANGLE MAP: Hamden, CT
- D. SITE ADDRESS: 208 Kirk Road, Hamden, CT
- E. <u>ZONING WITHIN 1/4 MILE OF SITE</u>: Land within ¼ mile of the cell site is in Hamden's R-3 Residential zoning district and R-2 Residential zoning district.

#### II. DESCRIPTION

- A. SITE SIZE: 55' x 50' Fenced Compound Area
- B. <u>LESSOR'S PARCEL</u>: Approximately 9.34 acres
- C. <u>TOWER TYPE/HEIGHT</u>: 160' Monopole Tower

163' Top of Antennas

- D. <u>SITE TOPOGRAPHY AND SURFACE</u>: Topography in the area slopes down generally from east to west. The 12-foot wide gravel access drive will extend from Country Club Drive, a distance of approximately 386 feet. Approximately 29 trees (6" diameter at breast height) will need to be removed to construct the access drive, facility compound or related improvements. Grading for installation of the access drive, facility compound and site drainage will be required.
- E. <u>SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER</u>: The tower would be located in the westerly portion of an approximately 9.34 acre parcel used for tree farming and residential purposes. The closest wetland area is located off the subject parcel approximately 300 feet to the south of the start of the access drive and more than 600 feet south of the facility compound.
- F. <u>LAND USE WITHIN 1/4 MILE OF SITE</u>: The 9.34 acre subject parcel is surrounded by the Laurel View Country Club to the west, residential uses to the south and undeveloped land to the north. (*See* Aerial Photograph and U.S.G.S. Topographic Map at pp. 2 and 3).

#### III. <u>FACILITIES</u>

- A. POWER COMPANY: Eversource
- B. <u>POWER PROXIMITY TO SITE</u>: Approximately 386 feet at Country Club Drive to the southeast of the facility compound.
- C. <u>TELEPHONE COMPANY</u>: Frontier Communications
- D. <u>PHONE SERVICE PROXIMITY</u>: Same as power
- E. <u>VEHICLE ACCESS TO SITE</u>: Vehicle access to the site would extend from Country Club Drive over a new gravel driveway a distance of approximately 386 feet.
- F. <u>CLEARING AND FILL REQUIRED</u>: Some tree clearing and minimal grading would be required for construction of the site compound. Detailed construction plans would be developed if this location is approved by the Siting Council.

#### IV. LEGAL

- A. PURCHASE [] LEASE [X]
- B. OWNER: Joseph Vignola and Denise Courtmanche Vignola
- C. ADDRESS: 208 Kirk Road, Hamden, CT
- D. DEED ON FILE AT:

Town of Hamden, CT Land Records

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# FACILITIES AND EQUIPMENT SPECIFICATION (NEW TOWER & EQUIPMENT)

SITE NAME: HAMDEN 8 – 208 KIRK ROAD, HAMDEN, CT

#### I. TOWER SPECIFICATIONS:

A. MANUFACTURER: To be determined

B. TYPE: Self-supporting monopole

C. TOWER HEIGHT: 160'

TOWER DIMENSIONS:

Approx. 50" base

Approx. 24" top

#### II. TOWER LOADING:

#### A. CELLCO EQUIPMENT:

- 1. Panel Antennas (12) Model SBNHH1D65B
- 2. Remote Radio Heads (RRH)
  Three (3) Model 2 x 60 and three (3) Model 2 x 90
- 3. GPS Antenna: Attached to the platform canopy
- 4. Transmission Lines:
  - a. Two (2) Model: HB158-1-08U8-S8J18 HYBRIFLEX™ fiber optic antenna cables

#### III. ENGINEERING ANALYSIS AND CERTIFICATION:

The towers will be designed in accordance with Electronic Industries Association Standard EIA/TIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures." The foundation designs would be based on soil conditions at the site. Details for the towers and foundation designs will be provided as a part of the final D&M Plan.

#### ENVIRONMENTAL ASSESSMENT STATEMENT

SITE NAME: HAMDEN 8 – 208 KIRK ROAD, HAMDEN, CT

#### I. PHYSICAL IMPACT

#### A. WATER FLOW AND QUALITY

No water flow and/or water quality changes are anticipated as a result of the construction or operation of the facility. There are no lakes, ponds, rivers, streams, wetlands or other regulated bodies of water located in the area to be used for the access drive, tower or equipment shelter. The equipment used will not discharge any pollutants to area surface or groundwater systems. The closest wetland area is off the property located approximately 300 feet to the south of the start of the proposed access road and approximately 600 feet from the proposed tower site.

#### B. <u>AIR QUALITY</u>

Under ordinary operating conditions, Cellco's equipment at the Hamden 8 Facility would generate no air emissions. During power outages and periodically for maintenance purposes, Cellco would utilize a diesel-fueled generator to provide emergency back-up power and recharge its on-site batteries. Cellco's back-up generator will be managed to comply with the "permit by rule" criteria established by the Connecticut Department of Energy and Environmental Protection ("DEEP") Bureau of Air Management, pursuant to R.C.S.A. § 22a-174-36, and therefore is exempt from general air permit requirements.

#### C. LAND

Approximately twenty-nine (29) trees, 6 inches or greater at breast height will need to be cleared and grading of the tower compound will be required. Cellco will construct a four-foot retaining wall along the west side of the facility compound. The proposed access driveway will traverse an area of steep slopes requiring the incorporation of side slope stabilization (rip-rap) and surface stabilization treatment. The remaining land of the Lessor would remain unchanged by the construction and operation of the cell site.

#### D. <u>NOISE</u>

The equipment to be in operation at the site after construction would emit no noise of any kind, except for the occasional operation of the back-up generator which would only run when power to the facility is interrupted and periodically for maintenance purposes. Some noise is anticipated during cell site construction.

#### E. POWER DENSITY

The worst-case calculation of power density for Cellco's 700 MHz, 850 MHz, 1900 MHz and 2100 MHz antennas at the Hamden 8 Facility would be 18.28% of the FCC Safety Standard. (*See* Attachment 13).

#### F. <u>VISIBILITY</u>

See Visibility Report included as Attachment 9.