

State Antenna Construction Threatens To Flood Crowell Road Property

by Tim Wood

CHATHAM – It isn't so much the view of the tower – which looks like a small missile or a very large model rocket – that bothers Tish Crowell. It's the possibility that her backyard could flood because a drainage swale was partially filled to accommodate the structure.

"I can see it just going to come right here," she said of stormwater runoff, looking at the yard of the Crowell Road home she shares with her husband, Robert, and the slope the leads up to the town's department of public works property. She points to a contour map that clearly shows her 243 Crowell Rd. property as the funnel point for the higher elevation land to the west.

Stormwater runoff into the backyard hasn't been a problem since the drainage swale was put in between the Crowells' property and the DPW yard. The drainage became a problem after the rear portion of the DPW land was developed and paved about 10 years ago, which resulted in runoff creating a "swimming pool" in her backyard, Crowell said. Now, with the swale partially filled, she worries that will happen again.

Standing on the west side of the partially-filled swale is a Continuously Operating Reference Station (CORS) tower that extends 21 feet above grade and another 12 feet below ground. Atop the steel mast is geodetic antenna. The structure was paid for and installed by the Massachusetts Department of Transportation's highway division, and will fill in a gap in the agency's state-wide CORS network, which provides Global Navigation Satellite System reference stations for surveying, engineering and GIS mapping for professionals and the public.

The town allowed the state to build the tower on the DPW site under an agreement signed last October by Town Manager Jill Goldsmith. The location was chosen, according to the agreement, due to a gap in



Massachusetts Department of Transportation Continuously Operating Reference Station (CORS) network tower at the Chatham Department of Public Works yard on Crowell Road. Neighbors say a drainage swale designed to keep their property from flooding was partially filled in to construct the tower; haybales were placed around the base after they complained. They've appealed the structure's building permit to the zoning board of appeals. TIM WOOD PHOTO

the network on the Outer Cape. MassDOT has no suitable facilities here to build a tower, so the Chatham site offers "an optimal solution towards enhancing the coverage" of the network, the agreement states.

Nobody bothered to notify the abutters that the tower was being built.

The Crowells learned about it last month when they

noticed work being done in the swale while they were walking along the bike trail, which runs behind the DPW facility. They made inquiries at the DPW and annex and were told that the town was not required to notify abutters – which is only them – and the structure did not need a building permit.

After more inquiries, they were told by Principal Projects Administrator Terry Whalen that a building permit should have been taken out for the structure. Crowell said she asked that a stop work order be placed on the project, and Whalen agreed.

However, when she came home for lunch on Sept. 26, construction of the tower had resumed. She later learned that a building permit had been issued within hours of the stop work order. Within three days the tower was completed, she said.

The Crowells have appealed the issuance of the building permit to the zoning board of appeals as "aggrieved parties." The hearing is scheduled for Thursday, Nov. 1, at 4 p.m. at the annex.

Although the appearance of the tower is a concern – "once the foliage falls, it's going to be ugly," Tish Crowell said – it's the flooding that most worries the couple. The deluge in August flooded their basement and yard with runoff from Crowell Road, and runoff from the DPW, bike trail and the cemetery beyond all heads down slope toward their property. Without the drainage swale to collect it, "it has nowhere to go" but their backyard, she said. The town placed hay bales around the base of the tower in the remaining swale, but she was skeptical that will do much good.

The agreement between the state and town runs through 2025, with automatic renewals every five years. The town receives no payment from the state, which agrees to maintain the facility. According to the building permit, the structure cost \$150,000.

Attempts to reach Whalen and MassDOT were unsuccessful.