

TOWN OF WELLESLEY



MASSACHUSETTS

ZONING BOARD OF APPEALS

888 WORCESTER STREET • SUITE 160 • WELLESLEY, MA 02482

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ZBA 2023-09

Petition of Town of Wellesley/Select Board
485 Washington Street (Police Station)

Pursuant to due notice, the Special Permit Granting Authority held a Public Hearing on Thursday, March 2, 2023, at 7:30 p.m. in the Kingsbury Room, 485 Washington Street, Wellesley, on the petition of the Town of Wellesley/Select Board requesting a Special Permit pursuant to the provisions of Section 5.20 and Section 6.3 of the Zoning Bylaw for replacement of an existing lattice radio antenna with a new 100 foot high lattice radio antenna that exceeds that height allowed by right, at 485 Washington Street, in a Limited Residence District.

On February 8, 2023, the Petitioner filed a request for a hearing before this Authority, and thereafter, due notice of the hearing was given by mailing and publication.

Present at the public hearing were Chief Jack Pilecki, Deputy Chief Scott Whittemore, and Officer Tim Gover, Wellesley Police Department.

Chief Pilecki said that the request is for a special permit for a radio tower. He said that for the past couple of years, the Police have been installing a new communication system that includes the tower outside the building. He said that they completed the dispatch center and the final phase is the tower. He said that the existing lattice tower was built in 1949, almost 75 years ago. He said that it needs to be replaced because it is unsafe and is overloaded with equipment. He said that they cannot get a service man to climb the tower due to safety concerns.

Chief Pilecki said that the existing tower is 89 feet high. He said that the request is for a 100 foot tower that is required to maintain the same radio coverage for the town.

A Board member asked about costs issues. He said that the bylaw prohibits lattice towers. Chief Pilecki said that a non-lattice tower is twice the cost. He said that they currently have Police, Fire, DPW, and State Police on the tower. He said that it will be a Class 3 Public Safety tower, constructed in five 20 foot sections. He said that his understanding is that the town bylaw was enacted to prevent Diehl's Hardware from putting a radio tower up.

The Chairman said because a lattice antenna is prohibited under the antenna bylaw, the Board could not grant relief with a special permit under that by-law. He said that he is satisfied that the current tower does

pre-exist enactment of the antenna bylaw. He said that if it is a pre-existing nonconforming tower, both the State Statute and the Zoning Bylaw give certain rights to replace a nonconforming structure such as this. He said that for pre-existing nonconforming structures and lots, the State Statute gives preferences to one and two family homes and allows the Board to grant special permits if it makes a finding that the new structure is not substantially more detrimental to the neighborhood than the current structure. He said that under the law, the same standard does not exist for non-one or two family homes. He said that under the statutes, rights to allow rebuilding a nonconforming structure are limited. He said that he was cognizant of the importance of the request with respect to public safety for everyone in the town. He said that there is a provision in the bylaw that allows for a disaster rebuild. He said that if a pre-existing structure fails, the Board can allow a permit for reconstruction. He said that the Board has to be convinced that the existing tower is a hazard.

Chief Pilecki said that they currently can't find a maintenance worker for fear of that person's life. He said that, according to the technicians, the tower is overloaded and has no business still standing. He said that it could cause a lot of damage or kill someone if it comes down. The Chairman said that there is a public safety aspect of the request and the structure is a public hazard. He said that losing the service would be a disaster for the town.

Deputy Chief Showstead said that the original tower was constructed in 1949 to support a low band radio system, which was one antenna for the entire town. He said that they switched to a different radio system in the 1980's which required them to move the main transmitter antenna to Maugus Hill. He said that it was a supplement antenna that they used for day to day communications and emergency backup. He said that when they took on the Fire Department and combined dispatch in the 1990's, the tower was taken down and put back up. He said that they did not put up a new tower when the new station was built in the 1990's. He said that they added many other Fire Department channels which are part of the communications plans for the community. He said that over the past few years many contractors have told them that the tower should be replaced due to the condition that it is in. He said that it is in deplorable condition. He said that it is not a disaster yet but it is at a point where it could be and they foresee it.

The Chairman discussed disaster rebuild. He said that the only other issue connected to disaster rebuild is that the repair or reconstruction shall be used in the same manner and the nonconforming nature of the repair to reconstruct the building does not increase in any respect. He said that the proposal is to go up an additional 11 feet. Chief Pilecki said that the existing tower is 89 feet. He said that they do not make sections to make it that height. He said that they need the 100 feet to cover the town.

A Board member asked if Chief Pilecki spoke with the Executive Director about coming up with the extra money for a conforming antenna. Chief Pilecki said that he had not. He said that if they were to put a monopole antenna, it would look terrible and would draw more attention. He said that the lattice blends in with the trees. He said that the base of the monopole would be a five foot tall cement block, which would make the monopole even higher.

A Board member confirmed that the tower was constructed in 1949 and that a new Police Station was built in 1995. Chief Pilecki said that at the time, they were able to take the tower down to facilitate putting the building up and then put the tower back up in the same location. The Chairman said that the tower was not abandoned.

A Board member said that replacing the tower in the same location provides the same screening. He said that the railroad tracks are behind it. Deputy Chief Showstead said that there will be one antenna at the top that will go into a box that will divide into 24 separate antennas. He said that the antenna at the top will feed to a box in the Police Station basement. He said that there will be one cable coming down, which is much cleaner and neater. He said that when they specked this out, the desire was to be respectful of the neighborhood and to keep it the same way because no one knew that it was back there. He said that a monopole would be a significant change to the neighborhood.

There was no one present at the Public Hearing who wished to speak to the petition.

Statement of Facts

The subject property is located at 485 Washington Street, in a Limited Residence District.

The petitioner is requesting a Special Permit pursuant to the provisions of Section 5.20 and Section 6.3 of the Zoning Bylaw for replacement of an existing lattice radio antenna with a new 100 foot high lattice radio antenna that exceeds the height of 45 feet that is allowed by right.

The following materials were submitted:

- Completed Zoning Board of Appeals Application form and Antenna Survey
- Memorandum, dated January 12, 2023, from Chief Jack Pilecki, Wellesley Police Department, re: Scope and Purpose of Radio Antenna Replacement
- Google Earth Aerial Photograph of Proposed Tower Location
- Memorandum, with attachments, dated October 3, 2022, stamped by Stephen Yeo, P.E., re: 100 Ft RT Self Support Tower Wellesley, MA
- Photographs

On December 9, 2022, the Design Review Board voted to recommend the Zoning Board of Appeals approve the proposed project as presented.

On February 23, 2023 and March 1, 2023, the Planning Board reviewed the petition. The Planning Board recommended that the Special Permit be denied in its revised recommendation.

Decision

This Authority has made a careful study of the materials submitted and the information presented at the hearing. The subject structure does not conform to the current Zoning Bylaw, as noted in the foregoing Statement of Facts.

It is the finding of this Authority that as the tower presents a danger to the public and can be rebuilt as a disaster rebuild to the height that it needs to be to serve the town.

Therefore, a Special Permit is hereby granted, as voted unanimously by this Authority at the Public Hearing, for replacement of an existing lattice radio antenna with a new 100 foot high lattice radio antenna, in accordance with the submitted plans

The Inspector of Buildings is hereby authorized to issue a permit for the installation upon receipt and approval of a building application and detailed constructions plans.

ZBA 2023-09
Petition of Town of Wellesley/Select Board
485 Washington Street (Police Station)

APPEALS FROM THIS DECISION,
IF ANY, SHALL BE MADE PURSUANT
TO GENERAL LAWS, CHAPTER 40A,
SECTION 17, AND SHALL BE FILED
WITHIN 20 DAYS AFTER THE DATE
OF FILING OF THIS DECISION IN THE
OFFICE OF THE TOWN CLERK.


Robert W. Levy, Acting Chairman


Walter B. Adams


Derek B. Redgate

123 MAR 16 PM 2:15
TOWN OF WELLESLEY
RECORDS & COMMUNICATIONS DEPARTMENT

ZBA 2023-09
Applicant Town of Wellesley/Select Board
Address 485 Washington Street

NOT VALID FOR RECORDING UNTIL CERTIFIED BY TOWN CLERK

In accordance with Section 11 of Chapter 40A of the Massachusetts General Laws, I hereby certify that twenty (20) days have elapsed after the within decision was filed in the office of the Town Clerk for the Town of Wellesley, and that no appeal has been filed, or that if such appeal has been filed, that it has been dismissed or denied.

Date:

Attest:

Cathryn Jane Kato
Town Clerk

cc: Planning Board
Inspector of Buildings
lrm

Wellesley PD New Tower

Legend
📍 Wellesley Police Department

Wellesley Oral Surgery and Implant Center

Wellesley Police Department

Proposed Tower Location

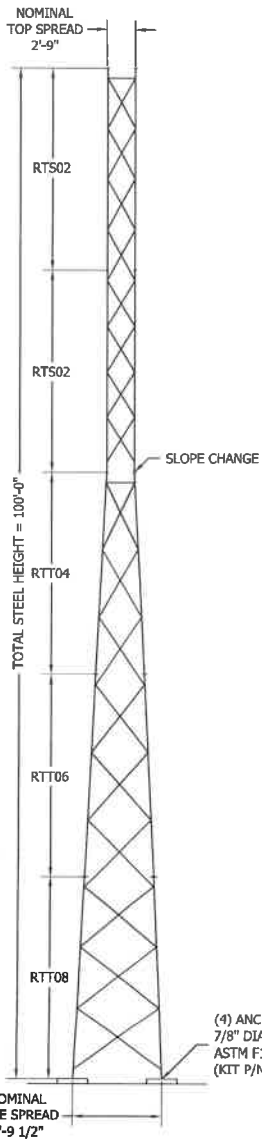
Doherty Geo F & Sons Funeral Homes

Google Earth

© 2022 Google

100 ft



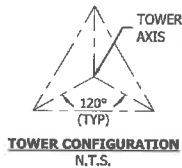


(4) ANCHOR BOLTS (12 TOTAL)
7/8" DIA. X 60" LONG
ASTM F1554 Gr. 105
(KIT P/N: 12D0879RFTST)

GENERAL NOTES

1. ROHN PRODUCTS, LLC TOWER DESIGNS CONFORM TO ANSI/TIA-222-H UNLESS OTHERWISE SPECIFIED UNDER TOWER DESIGN LOADING.
2. THE DESIGN LOADING CRITERIA INDICATED HAS BEEN PROVIDED TO ROHN. THE DESIGN LOADING CRITERIA HAS BEEN ASSUMED TO BE BASED ON SITE-SPECIFIC DATA IN ACCORDANCE WITH ANSI/TIA-222-H AND MUST BE VERIFIED BY OTHERS PRIOR TO INSTALLATION.
3. ANTENNAS AND LINES LISTED IN TOWER DESIGN LOADING TABLE ARE PROVIDED BY OTHERS UNLESS OTHERWISE SPECIFIED.
4. STEP BOLTS WITH SAFETY CLIMB SYSTEM ARE PROVIDED AS A CLIMBING FACILITY FOR THE INSTALLATION OF THE STRUCTURE.
5. TOWER MEMBER DESIGN DOES NOT INCLUDE STRESSES DUE TO ERECTION SINCE ERECTION EQUIPMENT AND CONDITIONS ARE UNKNOWN. DESIGN ASSUMES COMPETENT AND QUALIFIED PERSONNEL WILL ERECT THE TOWER.
6. WORK SHALL BE IN ACCORDANCE WITH ANSI/TIA-222-H, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
7. THE MINIMUM YIELD STRENGTH OF STRUCTURAL STEEL MEMBERS SHALL BE 50 KSI.
8. FIELD CONNECTIONS SHALL BE BOLTED. NO FIELD WELDS SHALL BE ALLOWED.
9. STRUCTURAL BOLTS SHALL CONFORM TO GRADE A325 PER ASTM F3125, EXCEPT WHERE NOTED.
10. PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
11. STRUCTURAL STEEL AND CONNECTION BOLTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION, IN ACCORDANCE WITH ANSI/TIA-222-H.
12. ALL HIGH STRENGTH BOLTS, UNLESS OTHERWISE NOTED FOR DOUBLE ANGLE MEMBERS, ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS". NO OTHER MINIMUM BOLT TENSION OR TORQUE VALUES ARE REQUIRED.
13. PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
14. TOLERANCE ON TOWER STEEL HEIGHT IS EQUAL TO PLUS 1% OR MINUS 1/2%.
15. DESIGN ASSUMES THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA-222-H.
16. DESIGN ASSUMES LEVEL GRADE AT TOWER SITE.
17. DESIGN ASSUMES ALL ANTENNAS ARE MOUNTED SYMMETRICALLY TO MINIMIZE TORQUE, IF APPLICABLE.
18. FOUNDATIONS SHALL BE DESIGNED TO SUPPORT THE REACTIONS SHOWN FOR THE CONDITIONS EXISTING AT THE SITE.

MAXIMUM FACTORED REACTIONS	
COMPRESSION PER LEG =	61.9 KIPS
TENSION PER LEG =	54.9 KIPS
SHEAR PER LEG =	5.1 KIPS
TOTAL SHEAR =	8.1 KIPS
TOTAL O.T.M =	452.9 FT-KIPS



TOWER DESIGN LOADING		
DESIGN WIND LOAD PER ANSI/TIA-222-H USING THE FOLLOWING DESIGN CRITERIA: RISK CATEGORY: III BASIC WIND SPEED (NO ICE): 128 MPH PER ASCE 7-16 BASIC WIND SPEED (W/ICE): 50 MPH PER ASCE 7-16 DESIGN ICE THICKNESS: 1.00 INCHES PER ASCE 7-16 GROUND ELEVATION, Zs: 137 FT EXPOSURE CATEGORY: B TOPOGRAPHIC METHOD: 1, CATEGORY: 1 SEISMIC DESIGN PARAMETERS, Ss: 0.251, S1: 0.064, T1: 6, SITE CLASS: D		
THIS STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE FOLLOWING LOADS:		
ELEVATION (FT)	ANTENNA LOADING	LINE SIZE (NOM)
TOP	LIGHTNING ROD	-
TOP	(3) BA4040-67-DIN, LEG MOUNTED	(3) 0-7/8"
TOP	(3) RFI COD2, LEG MOUNTED	(3) 0-7/8"
TOP	(3) RFI COD8, LEG MOUNTED	(3) 0-7/8"
TOP	(2) UNITY GAIN BROADBAND, LEG MOUNTED	(2) 0-7/8"

ANTENNAS WILL HAVE TO BE STAGGERED TO ENSURE FIT-UP.

SECTION MAIN MEMBER SCHEDULE			
SECTION	LEGS	DIAGONALS	HORIZONTALS
RTS02	PIPE 2.875x0.203	L1 1/2x1 1/2x1/8 (4)	L1 1/2x1 1/2x3/16 (1)
RTS02	PIPE 2.875x0.203	L1 1/2x1 1/2x1/8 (4)	N/A
RTT04	PIPE 3.500x0.216	L1 1/2x1 1/2x1/8 (3)	L1 1/2x1 1/2x3/16 (1)
RTT06	PIPE 3.500x0.216	L1 1/2x1 1/2x1/8 (3)	N/A
RTT08	PIPE 3.500x0.300	L1 3/4x1 3/4x1/8 (3)	N/A

NOTE:
SECTION NUMBERS ARE FOR REFERENCE ONLY.
FOR NOMINAL FACE WIDTH DIMENSIONS, REFER TO THE STRESS ANALYSIS.
THE NUMBERS SHOWN IN PARENTHESES INDICATE THE NUMBER OF BAYS FROM TOP TO BOTTOM.

FILE NO. 241415			
REVISIONS			
REV.	DESCRIPTION	DWN	CHK APP
 PO BOX 5999 PEORIA, IL 61601-5999 TOLL FREE 800-727-ROHN			
<small>THIS DRAWING IS THE PROPERTY OF ROHN, IT IS NOT TO BE REPRODUCED, COPIED OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.</small>			
INDUSTRIAL COMMUNICATIONS LLC DESIGN PROFILE 100' MEDIUM RT TOWER WELLESLEY, MA			
DWN: SWG	CHKD:	DATE: 10/03/2022	
ENGR: SY	SHEET #: 1 OF 1		
PRJ. ENGR: SWG	PRJ. MANGR:		
DRAWING NO: 241415-01-D1	REV: 0		