CITY OF PORTLAND, MAINE
SITE PLAN REVIEW
Processing Form

WPXT Portland Broadcasting Inc. — Applicant
March 27, 1986 — Date
2320 Congress Street, Portland, Maine — Mailing Address
2320 Congress Street — Address of Proposed Site
TV Studio — Proposed Use of Site
237-A-9 — Site Identifier(s) from Assessors Maps
50,000 sq. ft / — Acreage of Site / Ground Floor Coverage
I-1 — Zoning of Proposed Site

Site Location Review (DEP) Required: ( ) Yes (✓) No — Proposed Number of Floors
Board of Appeals Action Required: ( ) Yes (✓) No — Total Floor Area
Planning Board Action Required: ( ) Yes (✓) No

Other Comments: FAA Approval - Feb. 6, 1986

Date Dept. Review Due:

BUILDING DEPARTMENT SITE PLAN REVIEW
(Does not include review of construction plans)

☐ Use does NOT comply with Zoning Ordinance
☐ Requires Board of Appeals Action
☐ Requires Planning Board/City Council Action

Explanation

☐ Use complies with Zoning Ordinance — Staff Review Below

Zoning: SPACE & BULK, as applicable	DATE	ZONE LOCATION	INTERIOR OR CORNER LOT	40 FT. SETBACK AREA (SEC. 21)	USE	SEWAGE DISPOSAL	REAR YARDS	SIDE YARDS	FRONT YARDS	PROJECTIONS	HEIGHT	LOT AREA	BUILDING AREA	AREA PER FAMILY	WIDTH OF LOT	LOT FRONTAGE	OFF-STREET PARKING	LOADING BAYS	
COMPLIES																			
COMPLIES CONDITIONALLY																			CONDITIONS SPECIFIED BELOW
DOES NOT COMPLY																			REASONS SPECIFIED BELOW

REASONS:

W. D. Turner 4/25/86
SIGNATURE OF REVIEWING STAFF/DATE

BUILDING DEPARTMENT — ORIGINAL

CITY OF PORTLAND, MAINE
SITE PLAN REVIEW
Processing Form

Applicant _____ Date _____

Mailing Address _____ Address of Proposed Site _____

Proposed Use of Site _____ Site Identifier(s) from Assessors Maps _____

Acreage of Site / Ground Floor Coverage _____ Zoning of Proposed Site _____

Site Location Review (DEP) Required: ( ) Yes (✓) No Proposed Number of Floors _____

Board of Appeals Action Required: ( ) Yes (✓) No Total Floor Area _____

Planning Board Action Required: ( ) Yes (✓) No

Other Comments: _____

Date Dept. Review Due: _____

PLANNING DEPARTMENT REVIEW

(Date Received)

☐ Major Development — Requires Planning Board Approval: Review Initiated

☒ Minor Development — Staff Review Below

	LOADING AREA	PARKING	CIRCULATION PATTERN	ACCESS	PEDESTRIAN WALKWAYS	SCREENING	LANDSCAPING	SPACE & BULK OF STRUCTURES	LIGHTING	CONFLICT W/ CITY PROJEC.	FINANCIAL CAPACITY	CHANGE IN SITE PLAN	
APPROVED													
APPROVED CONDITIONALLY													CONDITIONS SPECIFIED BELOW
DISAPPROVED													REASONS SPECIFIED BELOW

REASONS: _____

(Attach Separate Sheet if Necessary)

_____

SIGNATURE OF REVIEWING STAFF/DATE

PLANNING DEPARTMENT COPY

CITY OF PORTLAND, MAINE
SITE PLAN REVIEW
Processing Form

Applicant _____ Date _____

Mailing Address _____ Address of Proposed Site _____

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Acreage of Site / Ground Floor Coverage _____ Zoning of Proposed Site _____

Site Location Review (DEP) Required: ( ) Yes (✓) No Proposed Number of Floors _____

Board of Appeals Action Required: ( ) Yes (✓) No Total Floor Area _____

Planning Board Action Required: ( ) Yes (✓) No

Other Comments: _____

Date Dept. Review Due: _____

PUBLIC WORKS DEPARTMENT REVIEW

(Date Received) _____

	TRAFFIC CIRCULATION	ACCESS	CURB CUTS	ROAD WIDTH	PARKING	SIGNALIZATION	TURNING MOVEMENTS	LIGHTING	CONFLICT WITH CITY CONSTRUCTION PROJECT	DRAINAGE	SOIL TYPES	SEWERS	CURBING	SIDEWALKS	OTHER	
APPROVED	/														/	
APPROVED CONDITIONALLY																CONDITIONS SPECIFIED BELOW
DISAPPROVED																REASONS SPECIFIED BELOW

REASONS: _____

(Attach Separate Sheet If Necessary)

Robert J Roy 3/28/86

SIGNATURE OF REVIEWING STAFF/DATE

PUBLIC WORKS DEPARTMENT COPY

CITY OF PORTLAND, MAINE

SITE PLAN REVIEW

Processing Form

Applicant _____ Date _____

Mailing Address _____ Address of Proposed Site _____

Proposed Use of Site _____ Site Identifier(s) from Assessors Maps _____

Acreage of Site / Ground Floor Coverage _____ Zoning of Proposed Site _____

Site Location Review (DEP) Required: ( ) Yes ( ) No Proposed Number of Floors _____

Board of Appeals Action Required: ( ) Yes ( ) No Total Floor Area _____

Planning Board Action Required: ( ) Yes ( ) No

Other Comments: _____

Date Dept. Review Due: _____

FIRE DEPARTMENT REVIEW

(Date Received) _____

	ACCESS TO SITE	ACCESS TO STRUCTURES	SUFFICIENT VEHICLE TURNING ROOM	SAFETY HAZARDS	HYDRANTS	SIAMESE CONNECTIONS	SUFFICIENCY OF WATER SUPPLY	OTHER	
APPROVED									
APPROVED CONDITIONALLY									CONDITIONS SPECIFIED BELOW
DISAPPROVED									REASONS SPECIFIED BELOW

REASONS: _____

(Attach Separate Sheet if Necessary)

James P. Collins, Lieut.
SIGNATURE OF REVIEWING STAFF/DATE

3-27-86

FIRE DEPARTMENT COPY

APPLICATION FOR PERMIT

PERMIT ISSUED
APR 30 1986
City Of Portland

B.O.C.A. USE GROUP .....
B.O.C.A. TYPE OF CONSTRUCTION ... 4.2.5 .....
ZONING LOCATION ..... PORTLAND, MAINE March 27, 1986

To the CHIEF OF BUILDING & INSPECTION SERVICES, PORTLAND, MAINE

The undersigned hereby applies for a permit to erect, alter, repair, demolish, move or install the following building, structure, equipment or change use in accordance with the Laws of the State of Maine, the Portland B.O.C.A. Building Code and Zoning Ordinance of the City of Portland with plans and specifications, if any, submitted herewith and the following specifications:

LOCATION .... 2320 Congress Street .. ...04102..... Fire District #1 ☐, #2 ☐
1. Owner's name and address ..WPXT Portland Broadcasting Inc. - same..... Telephone 774-0051.....
2. Lessee's name and address ..... Telephone .....
3. Contractor's name and address Tower Specialists - Falmouth, Me. ..... Telephone 797-8325.....
..... No. of sheets .....
Proposed use of building ..TV Studio..... No. families .....
Last use .Quality control & testing of integrated circuits..... No. families .....
Material ..... No. stories ..... Heat ..... Style of roof ..... Roofing .....
Other buildings on same lot ..... Pd 4-25-86
Estimated contractural cost $.7,900..... Bldg. Fee $ .....
Appeal Fees $ 60.00
FIELD INSPECTOR—Mr. ..... Base Fee 300.00 Minor Site Plan R.
@ 775-5451 Late Fee .....
TOTAL $ .....

Site Plan Review for 100' free standing tower and also satallite receive attenna, as per plans.
Also, change of use from quality control & testing of integrated circuits to TV Studio.

Stamp of Special Conditions

ISSUE PERMIT TO #1

NOTE TO APPLICANT: *Separate permits are required by the installers and subcontractors of heating, plumbing, electrical and mechanicals.*

DETAILS OF NEW WORK

Is any plumbing involved in this work? ..... Is any electrical work involved in this work? ...no.....
Is connection to be made to public sewer? ..... If not, what is proposed for sewage? .....
Has septic tank notice been sent? .... Form notice sent? .....
Height average grade to top of plate ..... Height average grade to highest point of roof ....
Size, front ..... depth ..... No. stories ..... solid or filled land? ..... earth or rock? ....
Material of foundation .... Thickness, top ..... bottom ..... cellar .....
Kind of roof ..... Rise per foot ..... Roof covering ....
No. of chimneys ..... Material of chimneys ..... of lining ..... Kind of heat ..... fuel .....
Framing Lumber—Kind ..... Dressed or full size? ..... Corner posts ..... Sills .....
Size Girder ..... Columns under girders ..... Size ..... Max. on centers .....
Studs (outside walls and carrying partitions) 2x4-16" O. C. Bridging in every floor and flat roof span over 8 feet.
Joists and rafters: 1st floor ....., 2nd ....., 3rd ....., roof .....
On centers: 1st floor ....., 2nd ....., 3rd ....., roof .....
Maximum span: 1st floor ....., 2nd ....., 3rd ....., roof .....
If one story building with masonry walls, thickness of walls? .... height? .....

IF A GARAGE

No. cars now accommodated on same lot ....., to be accommodated ..... number commercial cars to be accommodated .....
Will automobile repairing be done other than minor repairs to cars habitually stored in the proposed building? .....

APPROVALS BY: *DATE*
BUILDING INSPECTION—PLAN EXAMINER .....
ZONING: .....
BUILDING CODE: .....
Fire Dept.: .....
Health Dept.: .....
Others: .....

MISCELLANEOUS

Will work require disturbing of any tree on a public street? no..

Will there be in charge of the above work a person competent to see that the State and City requirements pertaining thereto are observed? .yes....

Signature of Applicant ..... Phone # .....
Type Name of above ..Neil Portney for WPXT..... 1 ☑ 2 ☐ 3 ☐ 4 ☐
Other .....
and Address .....

2

FIELD INSPECTOR'S COPY APPLICANT'S COPY OFFICE FILE COPY

2320 Congress

CATION FOR PERMIT

PERMIT ISSUED
APR 80 1986
City Of Portland

00475

RUCTION .....

..... PORTLAND, MAINE March 27, 1986

SERVICES, PORTLAND, MAINE

rect, alter, repair, demolish, move or install the following building, structure, aws of the State of Maine, the Portland B.O.C.A. Building Code and Zoning d specifications, if any, submitted herewith and the following specifications:

.....04102..... Fire District #1 ☐, #2 ☐

rtland Broadcasting Inc. - same ..... Telephone 774-0051

..... Telephone .....

3. Contractor's nam ower Specialists - Falmouth, Me. ..... Telephone 797-8325

..... No. of sheets .....

Proposed use of building TV Studio ..... No. families .....

Last use Quality control & testing of integrated circuits ..... No. families .....

Material ..... No. stories ..... Heat ..... Style of roof ..... Roofing .....

Other buildings on same lot ..... pd 4-25-86

Estimated contractural cost $ 7,900..... Bldg. fee

Appeal Fees $ .....60.00...

FIELD INSPECTOR—Mr. .....

@ 775-5451

Base Fee 300.00 Minor

Late Fee Site Plan R.

TOTAL $ .....

Site Plan Review for 100' free standing tower and also satallite receive attenna, as per plans.
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Stamp of Special Conditions

PERMIT ISSUED WITH LETTER

~~ISSUE PERMIT TO #1~~ See note

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DETAILS OF NEW WORK

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Height average grade to top of plate ..... Height average grade to highest point of roof .....

Size, front ..... depth ..... No. stories ..... solid or filled land? ..... earth or rock? .....

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Kind of roof ..... Rise per foot ..... Roof covering .....

No. of chimneys ..... Material of chimneys ..... of lining ..... Kind of heat ..... fuel .....

Framing Lumber—Kind ..... Dressed or full size? ..... Corner posts ..... Sills .....

Size Girder ..... Columns under girders ..... Size ..... Max. on centers .....

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BUILDING INSPECTION—PLAN EXAMINER .....

ZONING: .....

BUILDING CODE: .....

Fire Dept.: .....

Health Dept.: .....

Others: .....

MISCELLANEOUS

Will work require disturbing of any tree on a public street? no

Will there be in charge of the above work a person competent to see that the State and City requirements pertaining thereto are observed? yes

Signature of Applicant Neil Portnoy ..... Phone # SAME

Type Name of above Neil Portnoy for WPXT ..... 1 ☒ 2 ☐ 3 ☐ 4 ☐

Other .....

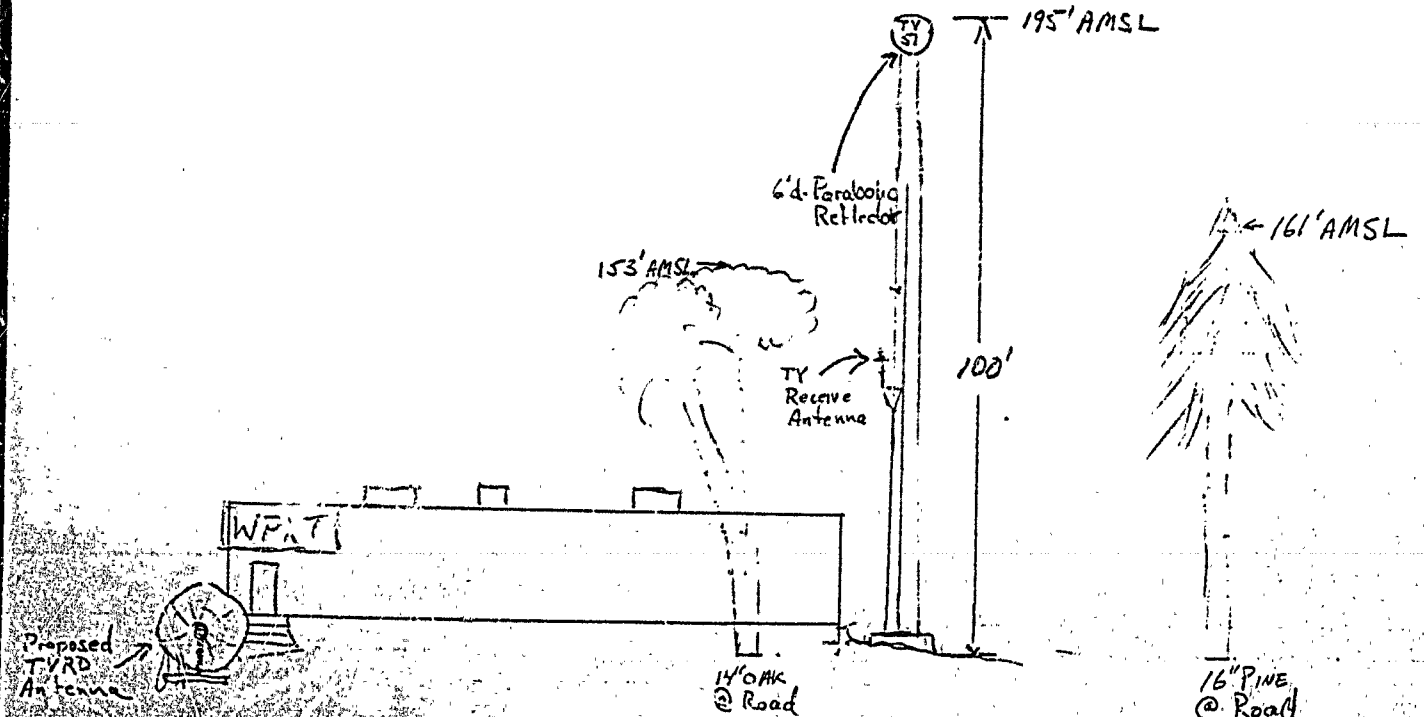
and Address .....

PERMIT ISSUED WITH LETTER

FIELD INSPECTOR'S COPY

APPLICANT'S COPY OFFICE FILE COPY

2 MA Carroll



Portland Broadcasting Inc
Proposed Tower + TVRD Antenna
2320 Congress St

Form Approved OMB No. 2120-0001

DO NOT REMOVE CARBONS

U.S. Department of Transportation
Federal Aviation Administration

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Aeronautical Study Number: 85-ANE-346-OE

1. Nature of Proposal

A. Type: [X] New Construction [ ] Alteration

B. Class: [X] Permanent [ ] Temporary (Duration _____ months)

C. Work Schedule Dates: Beginning 1-15-86; End 2-15-86

2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

A. 7075-7100 MHz STL
Directional 3° TV, 1.2° Beamwidth.
50,000 W ERP
B. Power lines 250' AGL @ 2100'
Nearest Proposed Tower

C. SEE ATTACHED DRAWING

(If more space is required, continue on a separate sheet.)

3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code)

(207) 774-0051
area code Telephone Number

PORTLAND BROADCASTING, INC.
2320 Congress ST
PORTLAND ME 04102

B. Name, address and telephone number of proponent's representative if different than 3 above.

N/A

4. Location of Structure

A. Coordinates (To nearest second)	B. Nearest City or Town, and State	C. Name of nearest airport, heliport, flightpark, or seaplane base
43° 39' 02" Latitude	PORTLAND, ME	Portland Jetport
70° 20' 08" Longitude	4 Miles 80° N	(1) Distance from structure to nearest point of nearest runway ~3,200'
		(2) Direction from structure to airport 100°

5. Height and Elevation (Complete to the nearest foot)

A. Elevation of site above mean sea level	95
B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated	100
C. Overall height above mean sea level (A + B)	195

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (If more space is required, continue on a separate sheet of paper and attach to this notice.)

SEE ATTACHED DRAWING

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than $500 for the first offense and not more than $1,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.

Date	Typed Name/Title of Person Filing Notice	Signature
12-3-85	NEIL PORTNOY	Neil Portnoy

FAA will either return this form or issue a separate acknowledgement.

FOR FAA USE ONLY

The Proposal:

- [ ] Does not require a notice to FAA.
- [X] Is not identified as an obstruction under any standard of FAR, Part 77, Subpart C, and would not be a hazard to air navigation.
- [ ] Is identified as an obstruction under the standards of FAR, Part 77, Subpart C, but would not be a hazard to air navigation.
- [ ] Should be obstruction [ ] marked, [ ] lighted per FAA Advisory Circular 70/7460-1, Chapter(s) _____
- [X] Obstruction marking and lighting are not necessary.

Remarks: SEE REVERSE

Supplemental Notice of Construction FAA Form 7460-2 is required any time the project is abandoned, or

- [ ] At least 48 hours before the start of construction.
- [ ] Within five days after the construction reaches its greatest height.

This determination expires on SEPT 12, 1986 unless:
(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

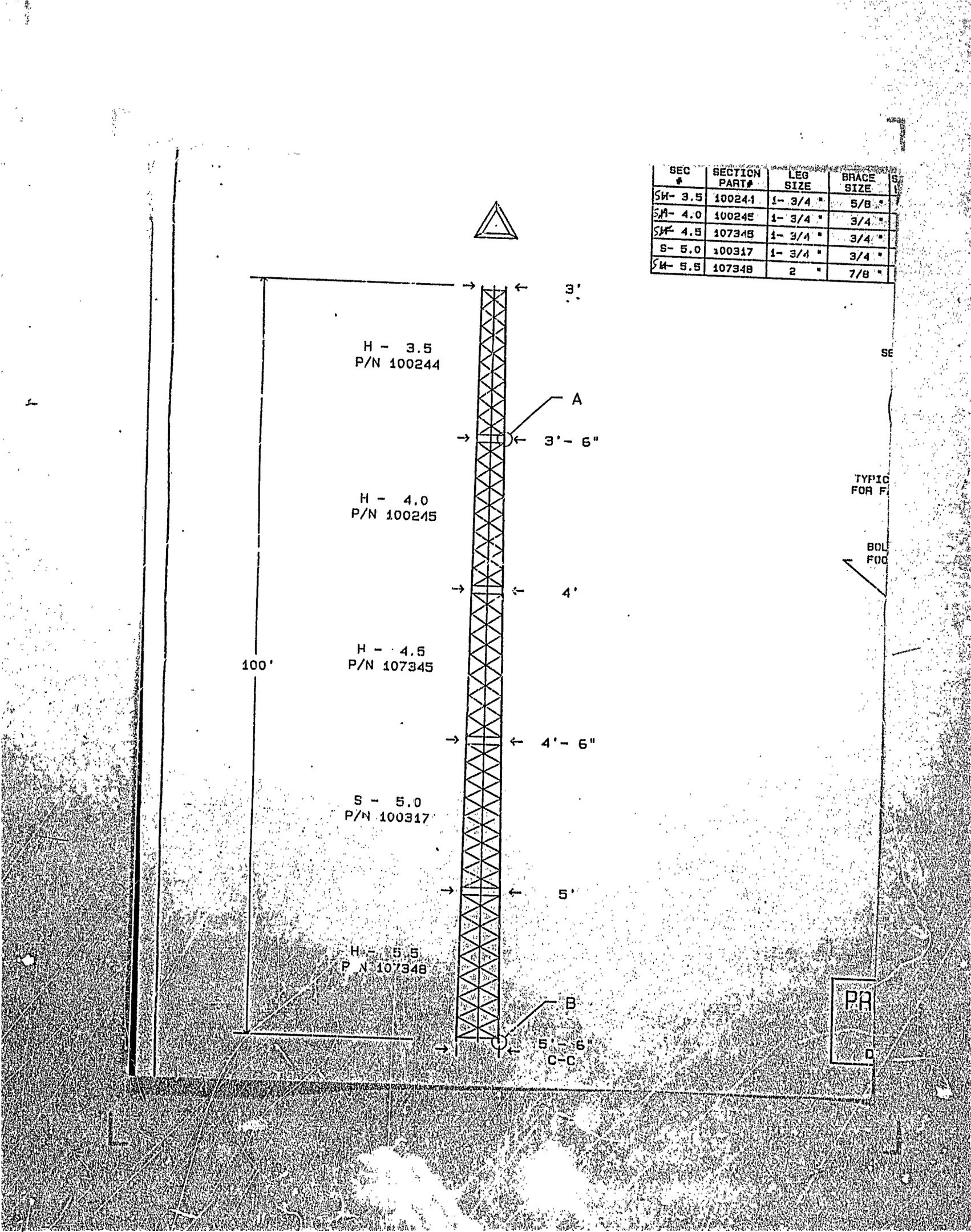
If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

Issued in	Signature	Date
BURLINGTON, MA.	Manuel Vargas	FEB 6, 1986

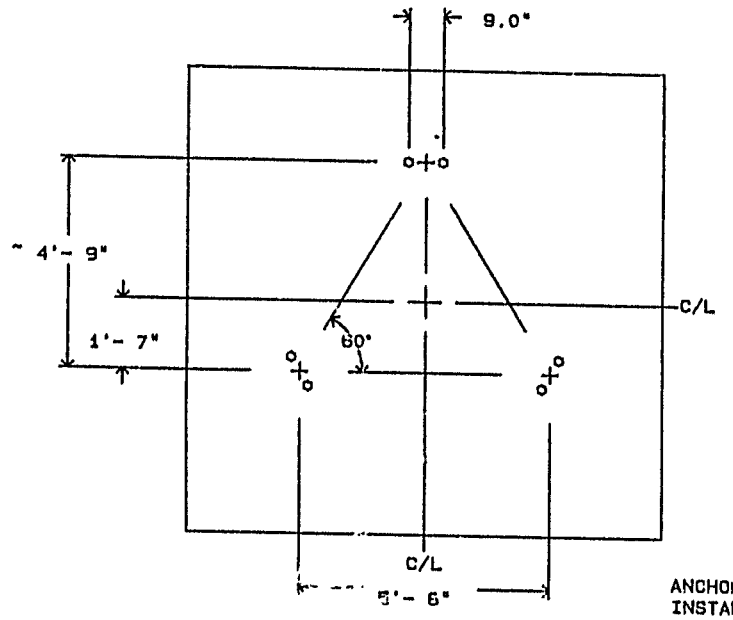
FAA Form 7460-1 (4-83) SUPERSEDES PREVIOUS EDITION

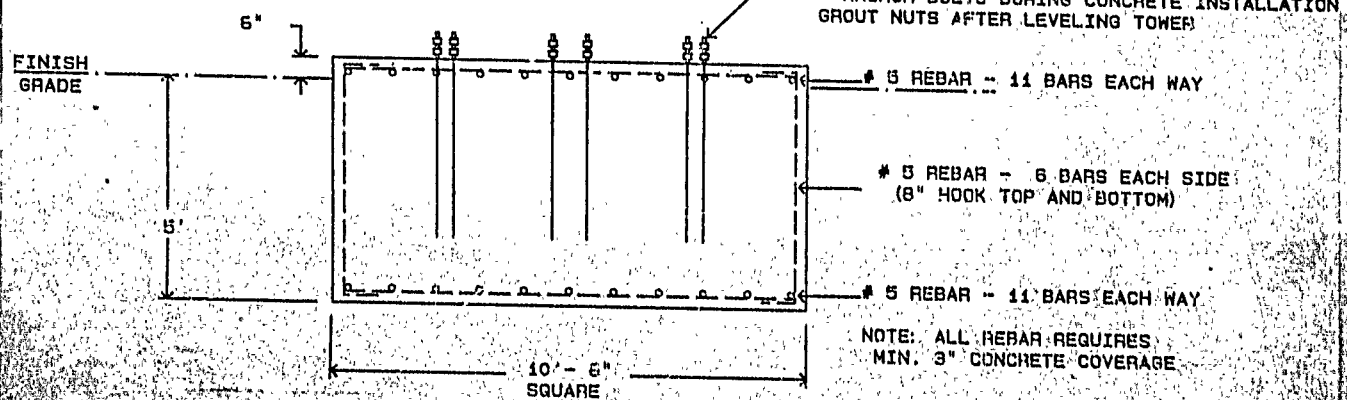
DO NOT REMOVE CARBONS

SEC #	SECTION PART#	LEG SIZE	BRACE SIZE	S
SW- 3.5	100241	1- 3/4 "	5/8 "	
SW- 4.0	100245	1- 3/4 "	3/4 "	
SW- 4.5	107345	1- 3/4 "	3/4 "	
S- 5.0	100317	1- 3/4 "	3/4 "	
SW- 5.5	107348	2 "	7/8 "	

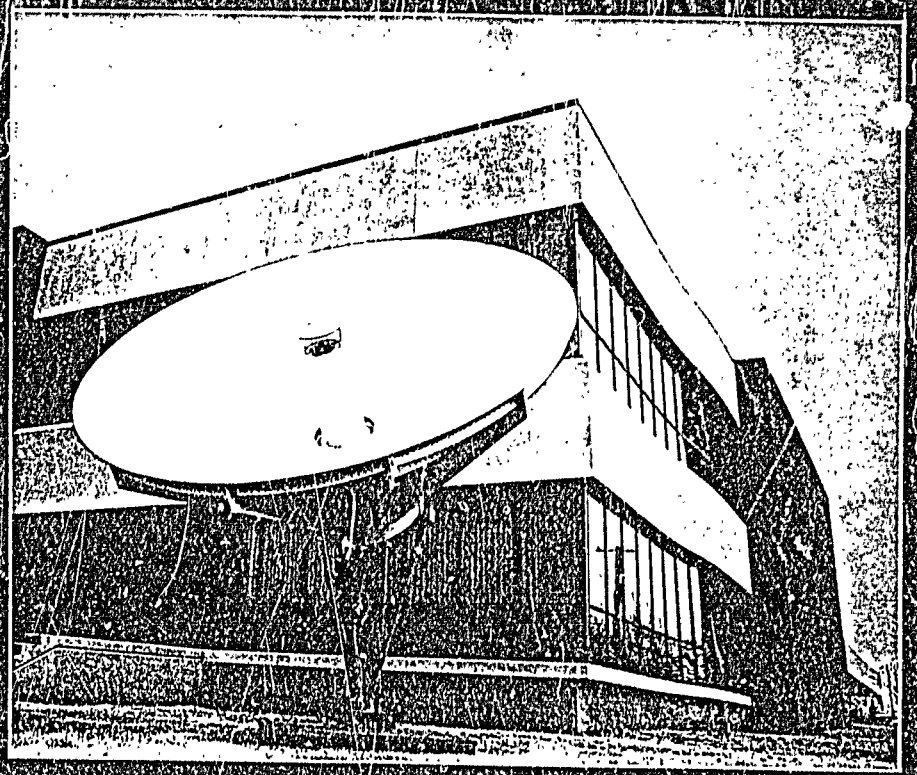


PRELIMINAR
DESIGN
DO NOT BUILD





22.4 CUBIC YARDS CONCRETE REQUIRED



VERTEX CAPABILITIES AND FACILITIES

Vertex Communications Corporation (formerly Vertex Antenna Operations) is a worldwide leader in the design and manufacture of commercial grade satellite earth station antennas.

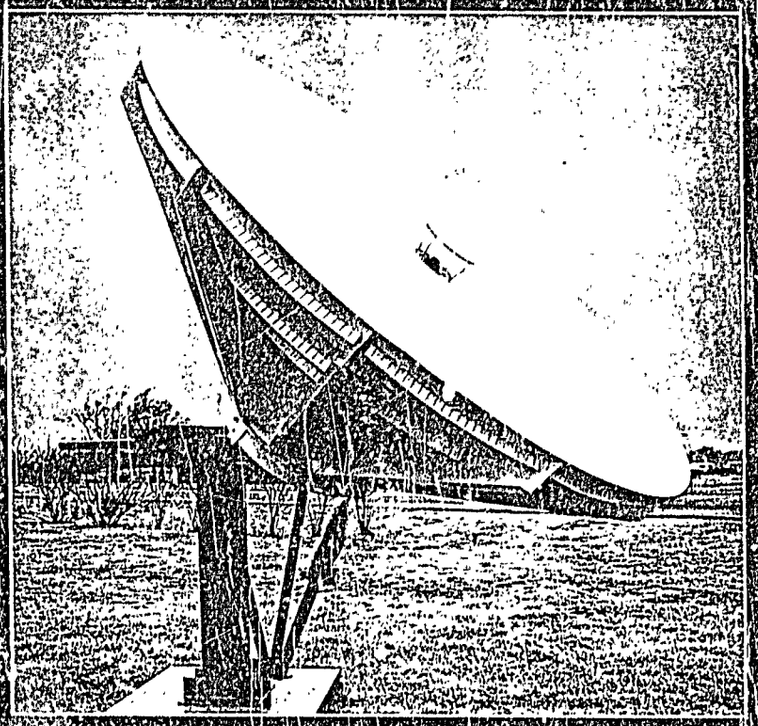
Vertex is a full service company, producing a complete line of C-Band and Ku-Band antennas ranging in size from 3.8 meters to 32 meters in diameter. In addition to satellite earth station equipment, Vertex offers custom engineering, turnkey installations, site testing and after sale service and maintenance.

CORPORATION

The corporate offices of Vertex are co-located at the plant in Kilgore, Texas. With the total company at one location, customers have easy access to all corporate officers as well as minimal turn-around time on decisions requiring corporate approval. With numerous years experience in the satellite communications business, the corporation can effectively and quickly solve any problem that might arise in the course of a business contract.

VERTEX COMMUNICATIONS CORPORATION

C-BAND & KU-BAND



VERTEX 4.57-METER

Model 4.6 KPC & KPK (Kingpost Pedestal)

EARTH STATION ANTENNAS

Vertex introduces the 4.57 Meter C-Band and KU-Band antennas that deliver exceptional performance for receive only and transmit/receive applications worldwide.

Model 4.6 KPC (C-Band) and 4.6 KPK (KU-Band) antennas feature all metal reflectors which incorporate doubly contoured formed panels with matched radiate and hub assemblies for ease of installation without field alignment. The reflectors coupled with azimuth/elevation kingpost pedestals provide the gain, pattern and pointing accuracy required for C-Band and KU-Band operation. The antennas are designed for full orbital arc coverage and are readily adaptable for ground and roof top installations.

The antennas meet the requirements for 2° satellite spacing per FCC Docket 81-704 and INTELSAT specification (KU-Band).

Options:

- Two port, four port, three port, linear or circular polarized feeds
- Reflector and feed defocusing (TVRO and half-satellite)
- Systems with manual or automatic controls
- Manual or motorized azimuth elevation and polarization drive systems with controls and readouts
- Turnkey installations or installation assistance

VERTEX

VERTEX COMMUNICATIONS CORPORATION

PERFORMANCE SPECIFICATIONS

SPECIFICATIONS	C-BAND		KU-BAND	
	RECEIVE	TRANSMIT	RECEIVE	TRANSMIT
Frequency*	3.7-4.2 GHz	5.925-6.425 GHz	11.7-12.2 GHz	14.0-14.5 GHz
Gain at Midband	44.0 dBi	47.1 dBi	53.2 dBi	54.5 dBi
VSWR	1.3:1	1.3:1	1.3:1	1.3:1
Beamwidth 1 dB	1.17°	0.78°	0.37°	0.32°
dB	2.36°	1.56°	0.75°	0.61°
Antenna Noise Temperature	2 Port Feed		2 Port Feed	
5° Elevation	46°K		72°K	
10° Elevation	29°K		56°K	
20° Elevation	23°K		47°K	
90° Elevation	19°K		43°K	
Typical G/T at 20° Elevation, Clear Horizon, 4 GHz				
With 40°K LNA dB/°K	25.5		29.3	
With 100°K LNA dB/°K	22.9		29.3	
Typical G/T at 20° Elevation, Clear Horizon, 12 GHz				
With 250°K dB/°K				
With 180° dB/°K				
Power Handling Capability		5kW Port		1kW**
Feed Interface	CPR 229G	CPR 159G	WR 75 Flat	WR-75 Flat
Feed Insertion Loss	0.10 dB	0.15 dB	0.3 dB	0.3 dB
Port-to-Port Isolation Tx to Rx	30 dB	30 dB	30 dB	30 dB
Cross Polarization Isolation: On Axis	35 dB (Typical 40dB)	35 dB	35 dB	35 dB
Within 1 dB Beamwidth	30 dB	30 dB	30 dB	30 dB
Axial Ratio (Circular Polarization) 2 Port Tx/Rx	2.9 dB (INTELSAT IV min)			
Sidelobes: 1st Sidelobe	12 dB		-12 dB	
1° to 7°			29-25 log θ dBi	
7° to 9.2°			+8 dBi	
9.2° to 48°			32-25 log θ dBi	
48° to 180°			-10 dBi	

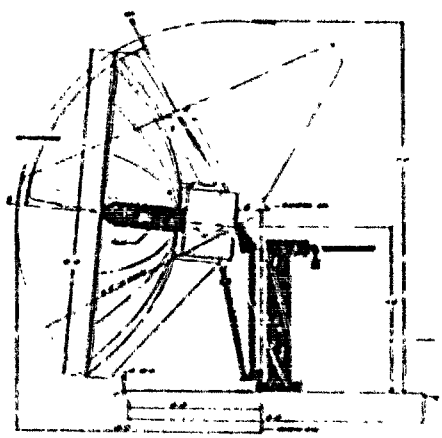
* Other frequencies available
** Higher power optional

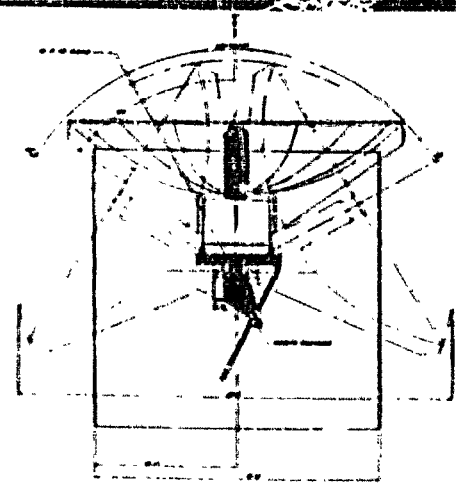
ENVIRONMENTAL SPECIFICATIONS

Operational Winds	45 mi/h (72 km/h) gusts to 60 mi/h (97 km/h)
Survival Winds (Any Position)	125 mi/h (200 km/h) @ 59°F (15°C)
Ambient Temperature (Survival)	-29° to 60°C (-20° to 140°F)
Rain (Operational and Survival)	Up to 4 in/h (10 cm/h)
Relative Humidity (Operational and Survival)	0% to 100% with condensation
Solar Radiation	360 BTU/ft² (1000 Kcal/m²)
Radial Ice (Survival)	1 inch (2.5 cm) on all surfaces or 1/2 inch (1.3 cm) on all surfaces with 60 mi/h (130 km/h) wind gusts
Shock and Vibration	As encountered during shipment by commercial air, rail or truck
Corrosive Atmosphere	As encountered in coastal regions and/or heavily industrialized areas
Seismic Survival	Intensity X

Specifications and product availability subject to change without notice.

ANTENNA GEOMETRY

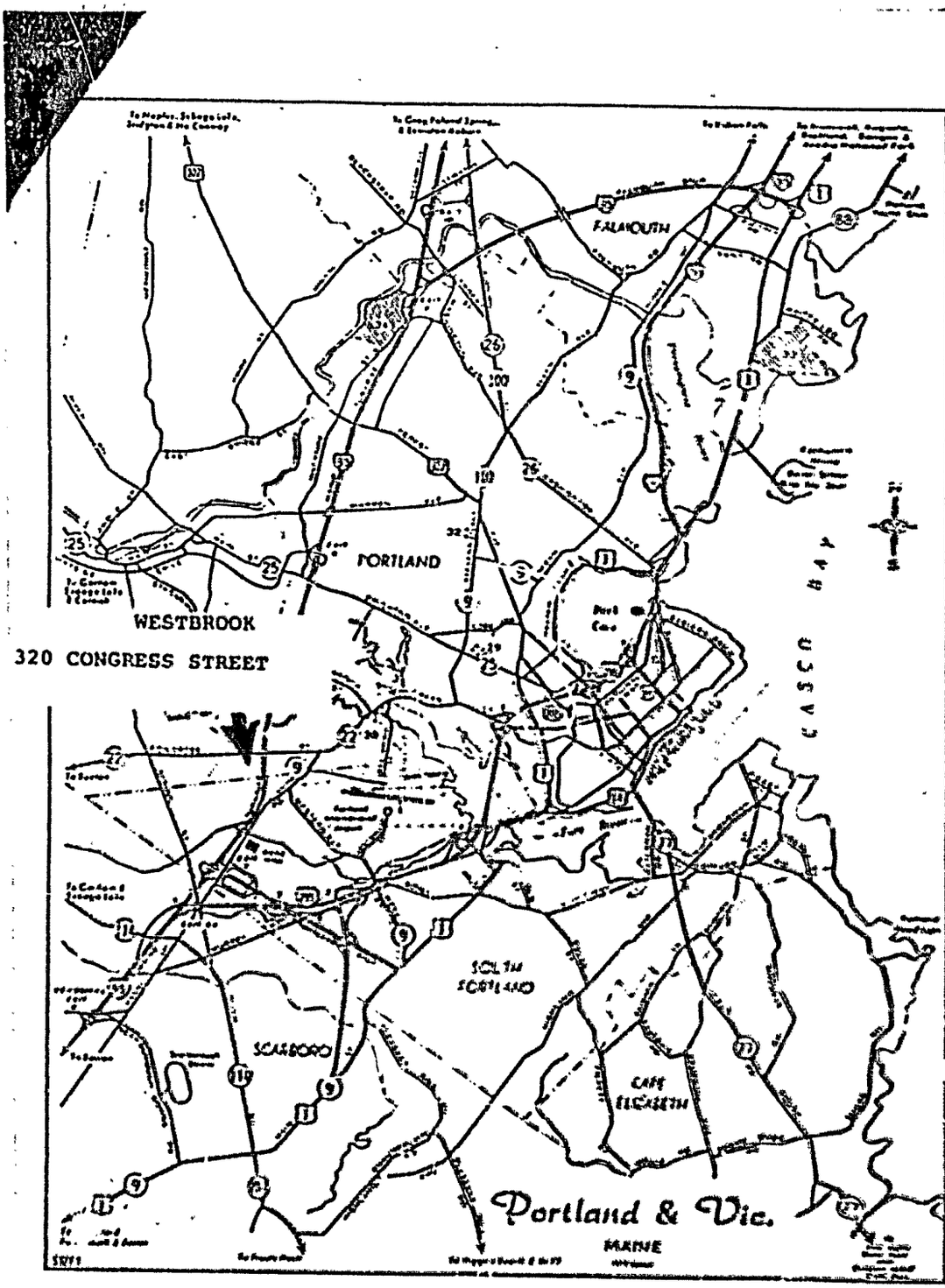


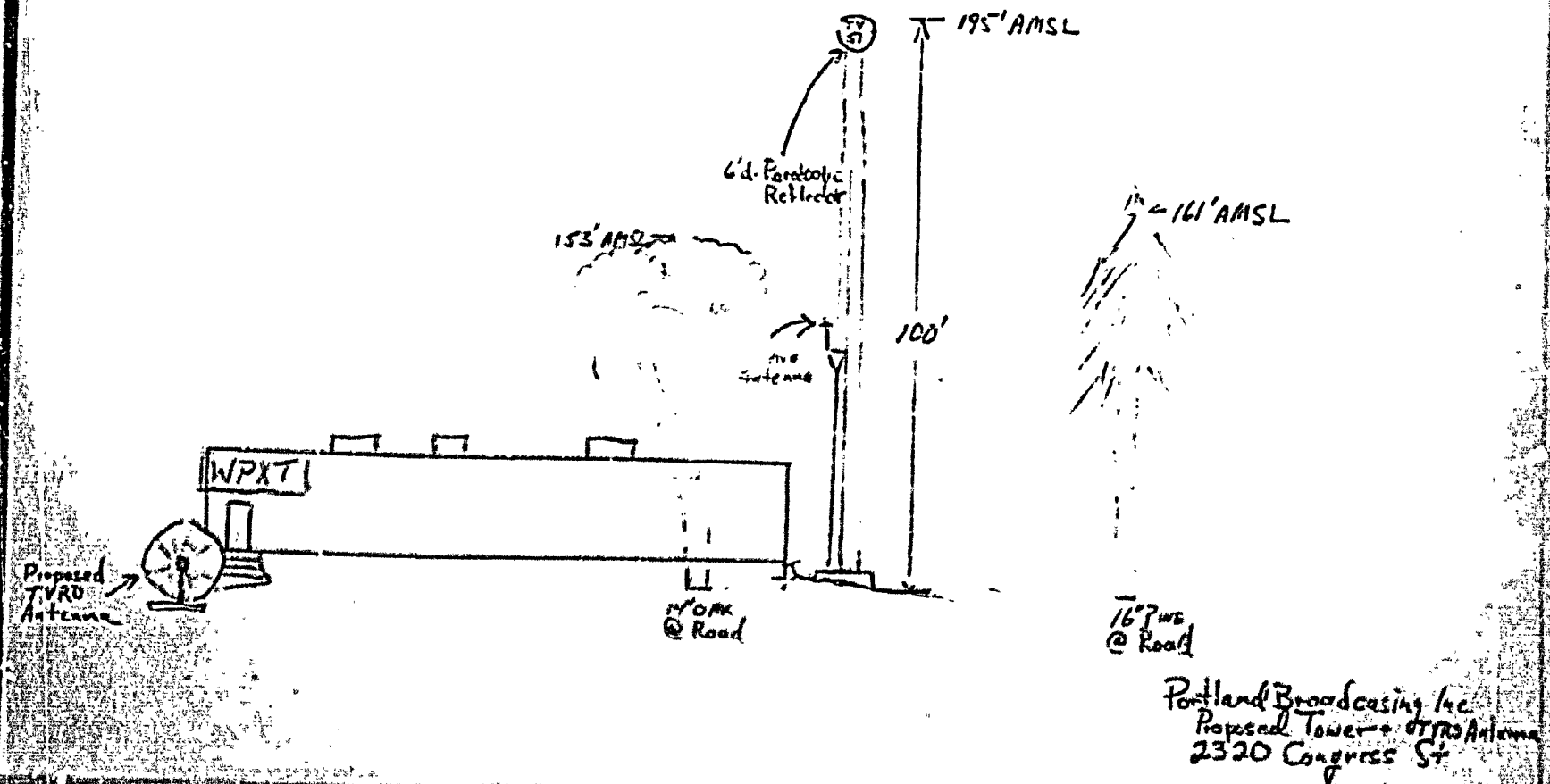


MECHANICAL SPECIFICATIONS

Azimuth Travel	120° continuous
Azimuth Travel Rate	2.6°/second, variable
Elevation Travel	5° to 85° continuous
Elevation Travel Rate	1.6°/second, min. slew
Polarization Travel	± 90°
Polarization Travel Rate	1.5°/second
Weight - Reflector	600 pounds (272 kg)
Weight - Pedestal	900 pounds (227 kg)
Shipping Weight (Typical)	1,500 pounds (681 kg)
Shipping Volume	450 cubic feet (12.7 m³)
Finishes	
Reflector Surface	Aluminum panels with heat diffusing white paint
Pedestal	Red oxide primer, and two coats of enamel
Surface Accuracy	(.020 inch plastic (0.5 mm)
Foundation Size	12.5 ft x 12.5 ft x 15 in (152.2 m x 11 m x 0.75 m)
Concrete Volume	7.35 cubic yards (5.5 m³)
Reinforcing Steel	900 pounds (227 kg)
Soil Bearing Pressure	2,000 PSF (10,000 kg/m²)

2600 LONGVIEW STREET • P.O. BOX 1277 • KILGORE, TEXAS 75662 • 214/984-0555


FALMOUTH
PORTLAND
WESTBROOK
320 CONGRESS STREET
CASCO BAY
SCARBORO
CAPE ELIZABETH
Portland & Vic.
MAINE



Portland Broadcasting Inc.
Proposed Tower + TVRO Antenna
2320 Congress St

DO NOT REMOVE CARBONS

Form Approved OMB No. 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Aeronautical Study Number: 85-ANE-346-OE

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
☒ New Construction	☒ Permanent	Beginning 1-15-86
☐ Alteration	☐ Temporary (Duration _____ months)	End 2-15-86

2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

A. 7075-7100 MHz STL
Directional 3 EN, 1.7 Beamwidth
2,000 W ERP
B. Transmission Line ~150' AGL @ 2100'
Nearest Proposed Tower

C. SEE ATTACHED DRAWING

(If space is required, continue on a separate sheet.)

3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code)

(207) 774-0051
area code Telephone Number

PORTLAND BROADCASTING, INC.
2320 Congress ST
PORTLAND ME 04102

B. Name, address and telephone number of proponent's representative if different than 3 above.

N/A

4. Location of Structure

A. Coordinates (To nearest second)	B. Nearest City or Town and State	C. Name of nearest airport, heliport, flightpark or seaplane base
43° 39' 02" Latitude	PORTLAND, ME	Portland Jetport
70° 20' 08" Longitude	4 Miles 80° N	(1) Distance from structure to nearest point of nearest runway ~3,200' (2) Direction from structure to airport 100°

5. Height and Elevation (Complete to the nearest foot)

A. Elevation of site above mean sea level	95
B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated	100
C. Overall height above mean sea level (A + B)	195

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (If more space is required, continue on a separate sheet of paper and attach to this notice.)

SEE ATTACHED DRAWING

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1104 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.

Date	Typed Name/Title of Person Filing Notice	Signature
12-3-85	NEIL PORTNOY	Neil Portnoy

FOR FAA USE ONLY — FAA will either return this form or issue a separate acknowledgment.

The Proposal:

- ☐ Does not require a notice to FAA.
- ☒ Is not identified as an obstruction under any standard of FAR, Part 77, Subpart C, and would not be a hazard to air navigation.
- ☐ Is identified as an obstruction under the standards of FAR, Part 77, Subpart C, but would not be a hazard to air navigation.
- ☐ Should be obstruction ☐ marked ☐ lighted per FAA Advisory Circular 70/7460-1, Chapter(s) _____
- ☒ Obstruction marking & lighting are not necessary.

Remarks: SEE REVERSE

Supplemental Notice of Construction — FAA Form 7460-2 is required any time the project is abandoned, or

- ☐ At least 48 hours before the start of construction.
- ☐ Within five days after the construction reaches its greatest height.

This determination expires on SEPT 15, 1986 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case this determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

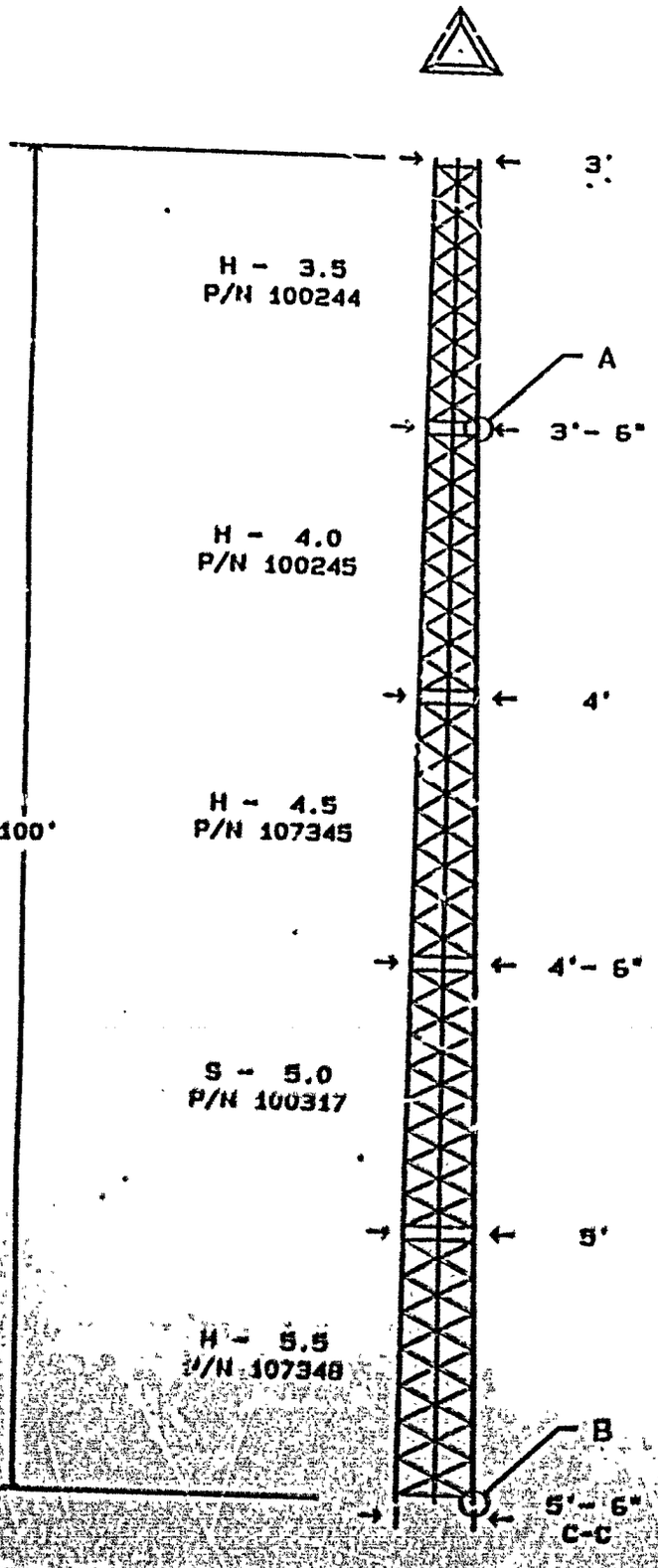
If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

Issued by	Signature	Date
BURLINGTON, MA	Wallace Hargrave	FEB 6 1986

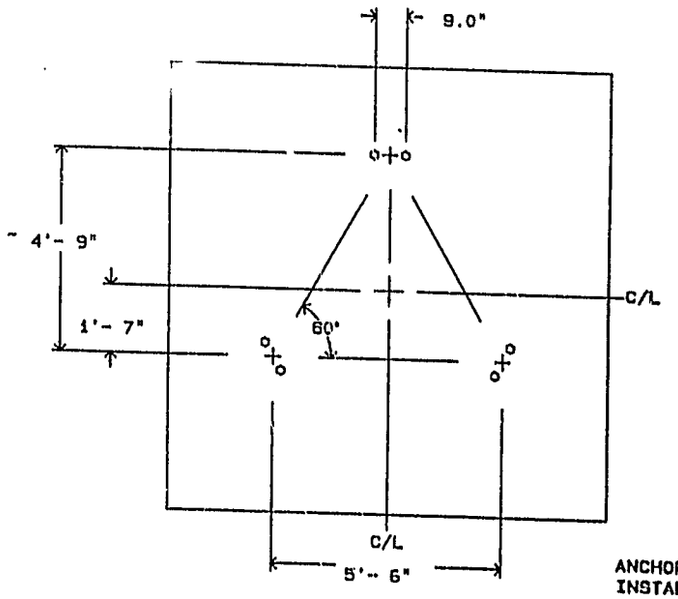
FAA Form 7460-1 (4-80) SUPERSEDES PREVIOUS EDITION

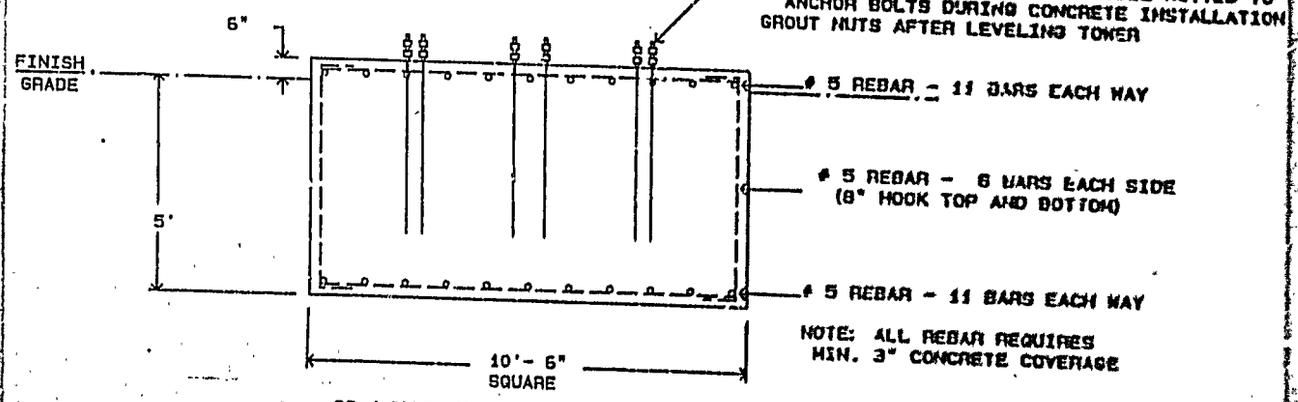
DO NOT REMOVE CARBONS

SEC #	SECTION PART#	LEG SIZE	BRACE SIZE	S
SW- 3.5	100244	1- 3/4 "	5/8 "	
SW- 4.0	100245	1- 3/4 "	3/4 "	
SW- 4.5	107345	1- 3/4 "	3/4 "	
S- 5.0	100317	1- 3/4 "	3/4 "	
SW- 5.5	107348	3 "	7/8 "	

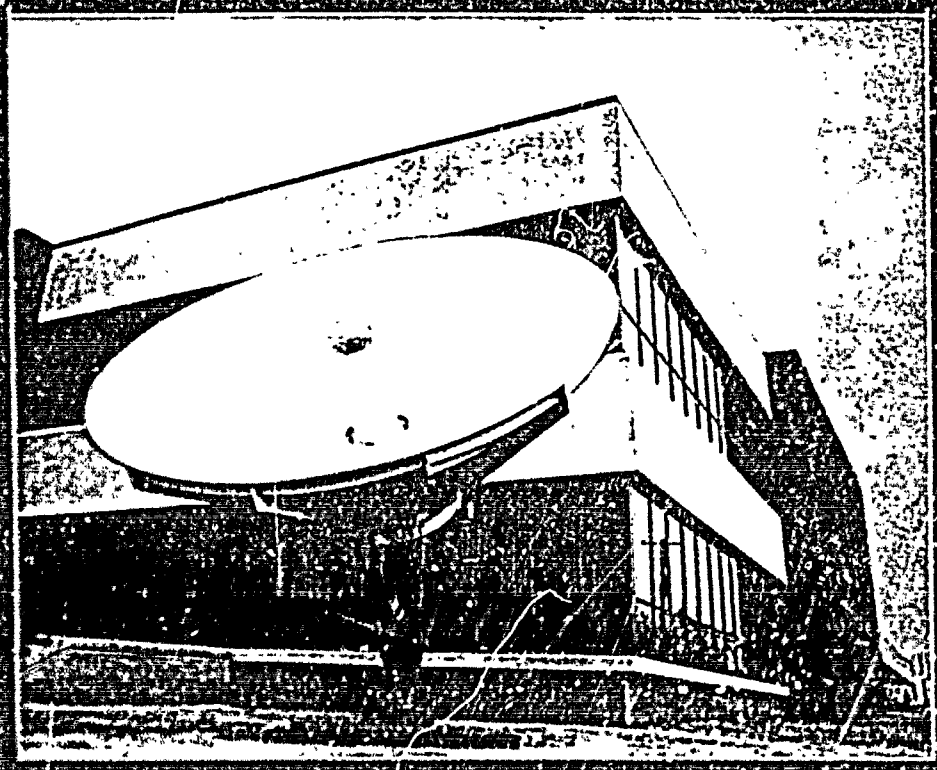


PRELIMINAR
DESIGN
DO NOT BUILD





22.4 CUBIC YARDS CONCRETE REQUIRED

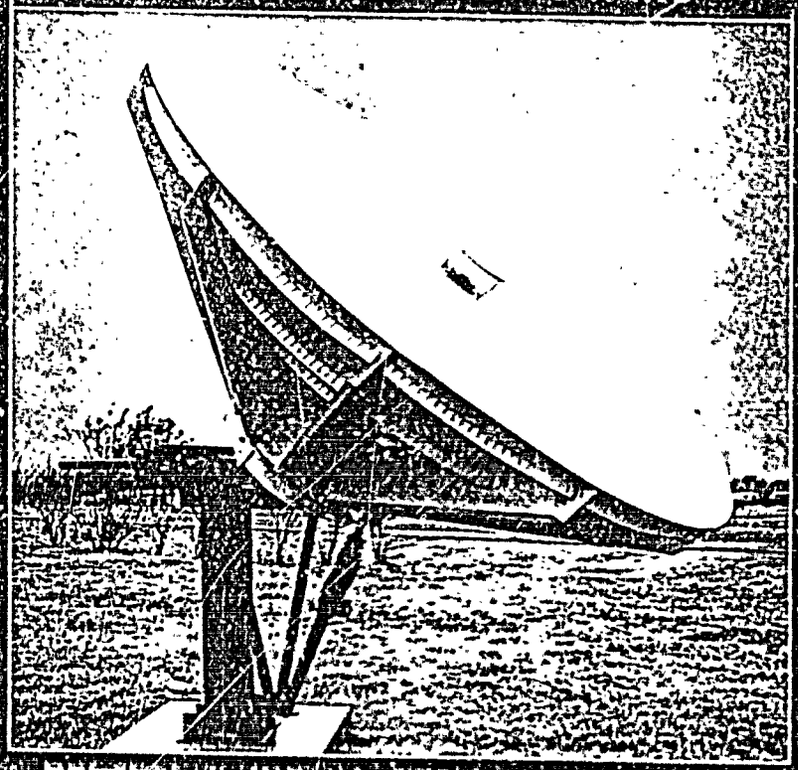


VERTEX CAPABILITIES AND FACILITIES

CORPORATION

VERTEX COMMUNICATIONS CORPORATION

C BAND & KU BAND



VERTEX 4.57 METER

Model 4.6 KPK (Ku Band Elevation Pedestal)

EARTH STATION ANTENNAS

Vertex introduces the 4.57 Meter C-Band and Ku-Band Antennas that deliver exceptional performance for receive only and transmit-receive applications worldwide.

Model 4.6 KPB (C-Band) and 4.6 KPK (Ku-Band) antennas feature all metal reflectors which incorporate doubly contoured aluminum panels with machined radials and hub assemblies for ease of installation without field alignment. The reflectors coupled with azimuth/elevation kingpost pedestals provide the stiffness and pointing accuracy required for C-Band and Ku-Band operation. The antennas are designed for full orbital arc coverage and are readily adaptable for ground mounting applications.

The antennas meet the requirements of satellite spacing per FCC Docket 81-704 and Intelsat specification IKU-Band).

Options:

- Two Port (Horiz, Vertz), three port, linear or circular polarized feeds
- Reflector and feed decking, full and half reflector systems with manual or automatic controls
- Manual or motorized azimuth, elevation and polarization drive systems with controls and encoders
- Numerous installations or installation assistance

VERTEX

VERTEX COMMUNICATIONS CORPORATION

PERFORMANCE SPECIFICATIONS

R.F. SPECIFICATIONS

	C-BAND RECEIVE	C-BAND TRANSMIT	KU-BAND RECEIVE	KU-BAND TRANSMIT
Frequency*	3.7-4.2 GHz	5.925-6.425 GHz	11.7-12.2 GHz	14.0-14.5 GHz
Gain at Midband	44.0 dBi	47.1 dBi	53.2 dBi	54.5 dBi
VSWR	1.3:1	1.3:1	1.3:1	1.3:1
Beamwidth -3 dB	1.17°	0.78°	0.37°	0.32°
-15 dB	2.36°	1.56°	0.75°	0.64°
Antenna Noise Temperature	2 Port Feed		2 Port Feed	
5° Elevation	46°K		72°K	
10° Elevation	29°K		56°K	
20° Elevation	23°K		47°K	
40° Elevation	18°K		43°K	
Typical G/T at 20° Elevation, Clear Horizon, 4 GHz				
With 40°K LNA, dB/°K	25.5		28.3	
With 100°K LNA, dB/°K	22.9		29.3	
Typical G/T at 20° Elevation, Clear Horizon, 12 GHz				
With 250°K LNA, dB/°K				
With 150°K LNA, dB/°K				
Power Handling Capability		5kW** Port		1kW**
Feed Interface	CPR-229G	CPR-159G	WR-75 Flat	WR-75 Flat
Feed Insertion Loss	0.10 dB	0.15 dB	0.3 dB	0.3 dB
Port-to-Port Isolation: Tx to Rx	30 dB	30 dB	30 dB	30 dB
Cross Polarization Isolation: On Axis	35 dB (Typical 40dB)	35 dB	35 dB	35 dB
With 1 dB Beamwidth	30 dB	30 dB	30 dB	30 dB
Axial Ratio (Circular Polarization): 2 Port Tx/Rx	2.9 dB (INTELSAT IV)			
Sidelobes*: 1st Sidelobe	-12 dB		-12 dB	
1° to 7°			29-25 log θ dBi	
7° to 9.2°			+ 5 dBi	
9.2° to 48°			32-25 log θ dBi	
48° to 180°			10 dBi	

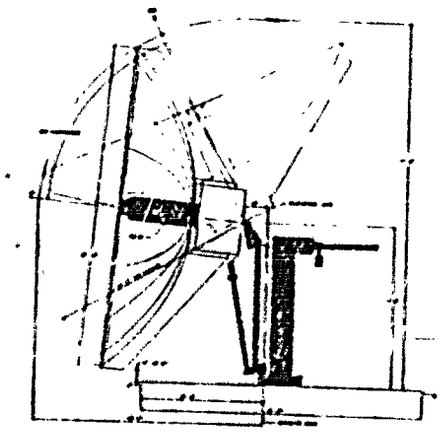
* - Other frequencies available
** - Higher power optional

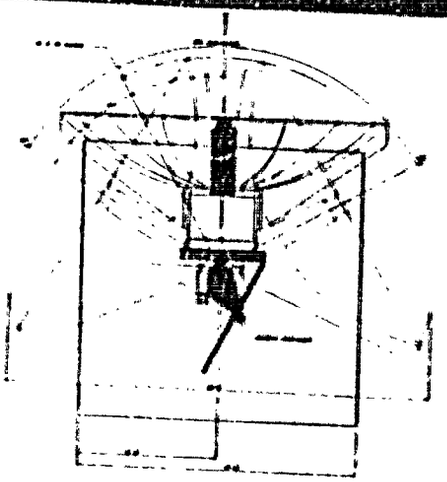
ENVIRONMENTAL SPECIFICATIONS

Operational Winds	45 mph (72km/hr) gusts to 60 mph (97 km/h)
Survival Winds (Any Position)	115 mph (185km/hr) / 50°F (75°C)
Ambient Temperature (Survival)	-29° to 60°C (-20° to 140°F)
Rain (Operational and Survival)	Up to 4 inch (10 cm/hr)
Relative Humidity (Operational and Survival)	0% to 100% with condensation
Solar Radiation	360 BTU (100* Kas)
Radial Ice (Survival)	1 inch (2.5 cm) on all surfaces or 0.2 inch (0.5 cm) on all surfaces with 50 mph (100 km/hr) wind gusts
Shock and Vibration	As encountered during shipment by common dirt air, rail or truck
Corrosive Atmosphere	As encountered in coastal regions and/or heavily industrialized areas
Seismic (Survival)	Meraelli X

Specifications and product availability subject to change without notice

ANTENNA GEOMETRY





MECHANICAL SPECIFICATIONS

Azimuth Travel	120° continuous
Azimuth Travel Rate	2.8°/second, variable
Elevation Travel	5° to 95° continuous
Elevation Travel Rate	1.0°/second, variable
Polarization Travel	± 90°
Polarization Travel Rate	1.5°/second
Weight - Reflector	808 pounds (377 kg)
Weight - Pedestal	500 pounds (227 kg)
Shipping Weight (Typical)	1,500 pounds (681 kg)
Shipping Volume	250 cubic feet (7.1 m³)

Finishes:	
Reflector Surface	Aluminum panels with heat diffusing white paint
Pedestal	Red oxide primer, and two coats of enamel
Surface Accuracy	0.020 inch rms (0.5 mm)
Foundation Size	12.5 ft x 12.5 ft x 15 in (3.8 m x 3.8 m x 0.38 m)
Concrete Volume	7.25 cubic yards (5.5 m³)
Reinforcing Steel	500 pounds (227 kg)
Soil Bearing Pressure	2,000 PSF (97,500 kg/m²)

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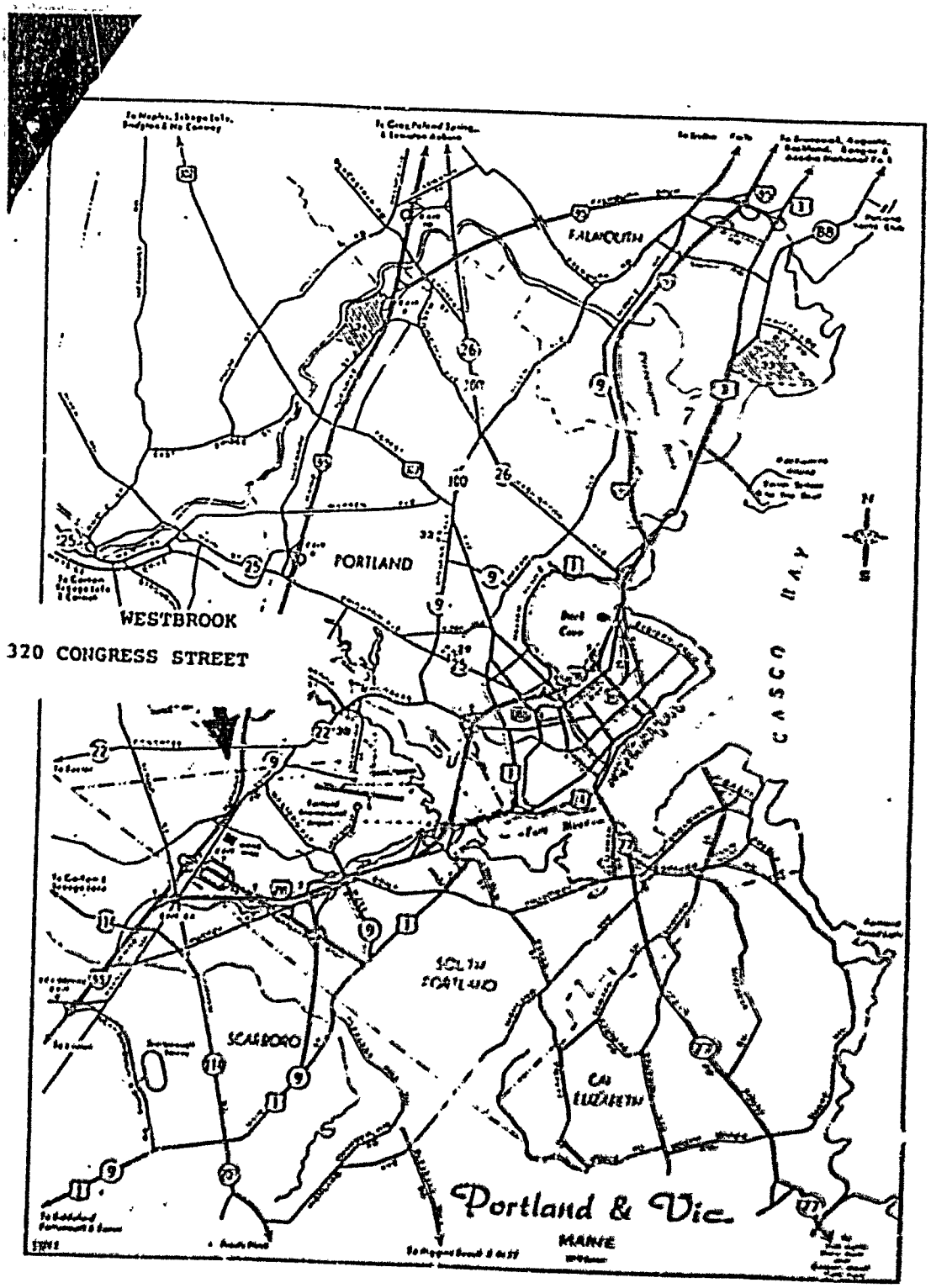

320 CONGRESS STREET

CITY OF PORTLAND

DEPARTMENT OF PLANNING & URBAN DEVELOPMENT
INSPECTION SERVICES DIVISION

April 28, 1986

RE: 2320 Congress Street

WPXT Portland, Broadcasting Inc.
2320 Congress Street
Portland, Maine

Dear Sir:

Your application to erect a 100' free standing tower and a satelite receiver antenna has been reviewed and a permit is herewith issued subject to the following requirements:

Site Plan Review Requirements

Building Inspection Services Approved Mr. W. J. Turner 4/25/86
Planning Division Approved Mr. D. Klink 4/23/86
Public Works Approved Mr. R. Roy 3/28/86
Fire Dept. Approved Lt. Collins 3/27/86

Building Code Requirements

1. All foundations must be inspected before backfilling; and,
2. The tower shall comply with sections 614 .1, 614.2, 614.3, 614.4, 614.4.1, 614.4.1.2 and section 614.5 of the 1984 BOCA Basic National Building Code.

If you have any questions on these requirements, please call this office.

Sincerely,

P. Samuel Hoffses
Chief of Inspection Services

PSH/sl

City of Portland, Maine – Building or Use Permit Application

389 Congress Street, 04101, Tel: (207) 874-8703, FAX: 874-8716

Permit No: 970015

PERMIT ISSUED

Permit Issued: JAN 9 1997

CITY OF PORTLAND

Location of Construction: 2320 Congress St	Owner: Richard Mack	Phone:	Business Name: Call for
Owner Address: lessee: 2320 Congress St- Ptld ME 04102	Lessee/Buyer's Name: W P X T TV Inc	Phone: 774-0051	Phone: pk-up
Contractor Name: Custom Design & Building	Address:	COST OF WORK: $ 21,700	PERMIT FEE: $ 130
Past Use: tv station/offices	Proposed Use: TV station/offices w inter renvtns	FIRE DEPT. ☑ Approved ☐ Denied Signature:	INSPECTION: Use Group: B Type: B00096 Signature:
Proposed Project Description: interior renovations		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: Approved ☐ Approved with Conditions: ☐ Denied ☐ Signature: Date:	
Permit Taken By: L Chase	Date Applied For: 1/6/97		

Zone: I-1 CBL:

Zoning Approval: 1/8/97

Special Zone or Reviews:
- ☐ Shoreland
- ☐ Wetland
- ☐ Flood Zone
- ☐ Subdivision
- ☐ Site Plan maj ☐ minor ☐ mn ☐

Zoning Appeal
- ☐ Variance
- ☐ Miscellaneous
- ☐ Conditional Use
- ☐ Interpretation
- ☐ Approved
- ☐ Denied

Historic Preservation
- ☒ Not in District or Landmark
- ☒ Does Not Require Review
- ☐ Requires Review

Action:
- ☐ Appoved
- ☒ Approved with Conditions
- ☐ Denied

Date: 1/8/97

1. This permit application doesn't preclude the Applicant(s) from meeting applicable State and Federal rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

15 cy dump permit: $150 #0129

PERMIT ISSUED WITH REQUIREMENTS

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit

Rei Y. Burkett — 1/6/97

SIGNATURE OF APPLICANT — ADDRESS: — DATE: — PHONE:

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE — PHONE:

CEO DISTRICT 4

White–Permit Desk Green–Assessor's Canary–D.P.W. Pink–Public File Ivory Card–Inspector