



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401
New Britain, Connecticut 06051
Phone: 827-7682

December 13, 1991

Jennifer Young Gaudet, Esq.
Slater, Sandler & Shulman, P.C.
One Hartford Square West
Hartford, Connecticut 06106

Dear Ms. Gaudet:

At a meeting on December 11, 1991, the Connecticut Siting Council (Council) decided not to take action on a notice of exempt modification at an existing community antenna television tower head-end site in Monroe filed by Housatonic Cable Vision Company, until a structural analysis of the tower and foundation is submitted documenting that the existing tower and foundation is capable of supporting the proposed modification.

If you have any questions, please call me.

Very truly yours,

A handwritten signature in black ink that reads "Joel M. Rinebold/bd".

Joel M. Rinebold
Executive Director

JMR/FC

5706E

Slater, Sandler & Shulman, P.C.

Attorneys at Law

One Hartford Square West
Hartford, Connecticut 06106

(203) 241-7700

Fax: (203) 241-7701

Mailing Address:

P.O. Box 231336
Hartford, CT 06123-1336

December 13, 1991



DEC 16 1991

Connecticut Siting Council
136 Main Street, Suite 401
New Britain, Connecticut 06051

**CONNECTICUT
SITING COUNCIL**

Attn: Joel M. Rinebold, Executive Director

Re: Housatonic Cable Vision Company - Notice Pursuant to Conn.
Agencies Regs. § 16-50j-73 - Monroe Facility

Dear Mr. Rinebold:

Housatonic Cable Vision Company (the "Company") hereby withdraws its notice of an exempt modification pursuant to Conn. Agencies Regs. § 16-50j-72(b)(2), dated November 27, 1991. The Company does not intend, at this time, to add a 10' dish at the 100' level of the tower.

The Company apologizes for any inconvenience caused the Council. Thank you for your consideration.

Respectfully yours,

HOUSATONIC CABLE VISION COMPANY

By Jennifer Young Gaudet
Jennifer Young Gaudet
Its Attorney

cc: The Honorable Kenneth S. Heitzke, Selectman, Town of Monroe

Slater, Sandler & Shulman, P.C.

OPICINAL

Attorneys at Law

One Hartford Square West
Hartford, Connecticut 06106

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November 27, 1991

HAND DELIVERED

Connecticut Siting Council
136 Main Street, Suite 401
New Britain, Connecticut 06051

Attn: Joel M. Rinebold, Executive Director

Re: Housatonic Cable Vision Company - Notice Pursuant to Conn.
Agencies Regs. § 16-50j-73 - Monroe Facility

Dear Mr. Rinebold:

Housatonic Cable Vision Company (the "Company") plans to install an additional antenna at the existing CATV tower and head-end facility located in the Town of Monroe. Please accept this letter as notice of intent, pursuant to Conn. Agencies Regs. § 16-50j-73, to install associated equipment which constitutes an exempt modification pursuant to Conn. Agencies Regs. § 16-50j-72(b)(2).

Housatonic intends to install one 10' dish at the 100' level of the tower to receive the Connecticut College Instructional Channel signal direct from Hartford, thereby improving the picture quality of that channel. In connection therewith, the installation of the 8' dish used to receive channels 30, 20 and 61, of which the Council was notified by letter from the undersigned, dated July 13, 1990, will be made at approximately the 89', rather than the 90', level, as previously planned.

The Company respectfully submits that the addition of the proposed antenna constitutes an exempt modification, as defined in Conn. Agencies Regs. § 16-50j-72(b)(2). The addition of the antenna will not increase the height of the 140' tower or extend the boundaries of the tower site. There will be no cognizable impact on noise levels at the tower site boundary, nor will there be any increase in the total radio frequency electromagnetic radiation power density measured at the site boundary, because the additional antenna is a receive-only antenna.

By copy of this letter, the chief elected official of the Town of Monroe is receiving written notice of the Company's intent to construct an exempt modification at its Monroe facility, as required by Conn. Agencies Regs. § 16-50j-73.

Mailing Address:

P.O. Box 231336
Hartford, CT 06123-1336

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NOV 27 1991

CONNECTICUT
SITING COUNCIL

Slater, Sandler & Shulman, P.C.

Connecticut Siting Council
November 27, 1991
Page 2

Thank you for your consideration.

Respectfully yours,

HOUSATONIC CABLE VISION COMPANY

By Jennifer Young Gaudet
Jennifer Young Gaudet
Its Attorney

Enclosures

cc: The Honorable Kenneth S. Heitzke, Selectman, Town of Monroe

Slater, Sandler & Shulman, P.C.

Attorneys at Law

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October 28, 1991

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OCT 28 1991

CONNECTICUT
SITING COUNCIL

Connecticut Siting Council
136 Main Street, Suite 401
New Britain, Connecticut 06051

Attn: Joel M. Rinebold, Executive Director

Re: Housatonic Cable Vision Company - Notice Pursuant to Conn.
Agencies Regs. § 16-50j-73 - Monroe Facility

Dear Mr. Rinebold:

Please accept this letter as notice of intent, pursuant to Conn. Agencies Regs. § 16-50j-73, to construct a new equipment building at the existing CATV tower and head-end facility of Housatonic Cable Vision Company ("Housatonic" or the "Company") located in the Town of Monroe, Connecticut. As set forth below, this construction constitutes an exempt modification pursuant to Conn. Agencies Regs. § 16-50j-72(b)(2).

Housatonic intends to construct a new equipment building, 24' by 30', at the Monroe tower site. The building will be placed wholly within the existing parcel leased by Housatonic from the Town of Monroe; construction will not entail any extension of the tower site boundaries nor will there be any increase in tower height. The addition of the building will not increase noise levels at the site boundary, except for temporary construction-related noise. Moreover, there will be no addition to the site's radio frequency sending or receiving capability.

The Company is aware of the sensitive environmental considerations associated with the former Town of Monroe landfill, on which the Company's tower site is located. The building will be constructed on a reinforced concrete mat on top of a crushed stone base, to avoid any disruption of the landfill cover material. Housatonic has received approval for its planned construction from the Connecticut Department of Environmental Protection ("DEP"), Engineering and Enforcement Division, Waste Management Bureau and has discussed with and received all necessary approvals from the Town of Monroe. For the Council's information, enclosed are the foundation analysis report prepared for Housatonic by Lobdell Consultants, P.C. and the DEP approval.

Slater, Sandler & Shulman, P.C.

Connecticut Siting Council
October 28, 1991
Page 2

By copy of this letter, the chief elected official of the Town of Monroe is receiving written notice of the Company's intent to construct an exempt modification at its Monroe facility, as required by Conn. Agencies Regs. § 16-50j-73.

Thank you for your consideration.

Respectfully yours,

HOUSATONIC CABLE VISION COMPANY

By Jennifer Young Gaudet
Jennifer Young Gaudet
Its Attorney

Enclosures

cc: The Honorable Kenneth S. Heitzke, Selectman, Town of Monroe

LOBDELL CONSULTANTS, P.C.
Geotechnical / Civil Engineering

October 9, 1991

Cable Vision
c/o Wiles and Associates Architects
155 Brooklawn Avenue
Bridgeport, CT 06604

Re: Report on Foundation Analysis
Proposed Cable Vision Building
Monroe, CT
Project 58-91

Gentlemen:

Following your request, we are pleased to submit our report on the foundation analysis made for the subject building to be constructed adjacent to existing Cable Vision facilities at the former landfill located on the east side of Guinea Road, in Monroe, CT.

The plans indicate that the building will be a masonry structure for the storage of light equipment and that the floor grade will be about 3 1/2 ft above present grade. The plans also provide for a mat foundation.

Our services have included a site visit; a literature search for case histories of settlement monitoring of landfills; discussion with your architect and structural engineer; and preparation of this report in which we discuss the problems of building on landfills, provide our best estimate of settlement that may be anticipated in the future and present our recommendations concerning type and depth of foundations and site preparation work required.

It is reported that a previous boring made for the tower disclosed the thickness of the landfill to be about 45 ft and that it consists of material typically found in municipal landfills or dumps. We understand that a capping of earth about 2 to 4 ft thick was placed over the landfill.

Analysis

Inasmuch as the earth capping cannot be disturbed by the penetration of piles, the proposed building must be constructed at or above present grade on shallow foundations. Settlement of any structure built on the landfill obviously must be anticipated because of the high compressibility

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28 Pleasant Street
Darien, CT 06820
(203) 655-8622

OCT 10 1991

WILLIS R. AGORIO ARCHITECTS

of the landfill material. In addition, landfills normally consolidate because of the decomposition or degradation of garbage, wood, metal, etc., movement of fines into voids and the compression of the material under its own weight. The existing building has probably undergone at least a foot of settlement with respect to the landfill grade judging from the tilting that has occurred.

Our literature search disclosed valuable information concerning settlement of landfills in the paper by Yen and Scanlon¹. The data presented in this paper, which is based on monitoring of 3 large landfills in Los Angeles County, was used by us to provide a rational basis for predicting the future behavior of the landfill. It was found in these landfill studies that the initial compression occurs quickly during and shortly after construction, but that the long-term settlement occurs for many years at a slowly diminishing rate; extrapolation of data indicates that small settlement may still be occurring after 20 years.

Applying the assumptions that the landfill at the site is about 45 ft thick and is about 42 years old to the Los Angeles study would indicate that settlement of the subject landfill is virtually complete and that future settlement, of any, will be slight. Periodic surveys of the site would be useful to verify this.

Recommendations

We concur with the plan to construct the building on a reinforced concrete mat; this, we believe, is the only feasible foundation type inasmuch as the earth capping cannot be penetrated. Such a foundation, however, should be built on a base of crushed stone, 3 1/2 ft thick, which should tend to produce a bridging action between the mat and the subgrade and which will minimize the differential settlement. The crushed stone base will eliminate the need to depress elements of the mat below final outside grade because the stone will not be frost susceptible.

The stone fill should extend at least 5 ft outside the mat and it should be constructed by placing it in a 12 in lifts and compacting each lift with a heavy vibratory roller. The upper lift of stone should be 1/2 in. in size to facilitate fine grading; the underlying lifts can consist of stone in the range of 3/4 to 1 in. in size. Processed aggregate, which contains fines, should not be used.

(1) Sanitary landfill settlement rates, by Yen and Scanlon, Journal of the Geotechnical Engineering Division, 1975, vol. 101, American Society of Civil Engineers.

Although the landfill itself is probably fairly well stabilized, the imposition of the load of the building and the stone base will compress the zone of fill stressed by this load. Our best estimate is that 1 to 2 ft of settlement of the building should be anticipated in the long term or post construction period with respect to the landfill surface.

We suggest that if future tilting of the mat becomes a problem, leveling should be easily accomplished by simply jacking up a corner of the mat and pumping grout between the mat and the subgrade. Another option would be to pump through vertical sleeves installed in the mat during construction.

A plastic membrane should be placed on top of the crushed stone base to preclude possible gas leakage from the landfill into the building.

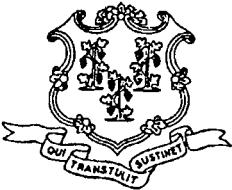
The conduits between the new and the existing buildings and elsewhere should be extremely flexible to allow for future differential movement.

We appreciate the opportunity of assisting you with this project. Please call us if we can be of further service.

Very truly yours,


Herbert L. Lobdell,

cc: David Seymour, P.E.



STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION



October 10, 1991

Mr. Larry Edwards
L Edwards Associates
227 Stepney Road
Easton, CT 06612

Dear Mr. Edwards:

The Waste Engineering & Enforcement Division/Solid Waste Section of the Waste Management Bureau has received a proposal regarding the construction of an equipment building, to hold equipment associated with an existing cable tower facility maintained by the Housatonic Cable Vision Company, on the closed municipal solid waste disposal area located on Guinea Road in the Town of Monroe.

Engineering plans indicate the equipment building will be constructed above the existing grade, with no disruption of the landfill cover material. The Department approves the proposal submitted by L. Edwards Associates, subject to the following conditions:

1. Prior to commencing any construction activities at the Guinea Road site, the Waste Engineering & Enforcement Division/Solid Waste Section shall be notified in writing.
2. During construction of the equipment building all necessary precautions shall be taken to ensure that there is no disruption or damage to the existing final capping material on the landfill. Any violations of the landfill cap (vehicle damage, etc.) shall be immediately repaired with proper cover material (>20% fines) and seeded.
3. Construction of the equipment building shall be as depicted in the engineering plans submitted in the September 16, 1991 L. Edwards Associates proposal to the Waste Engineering & Enforcement Division, any variation from these plans will need to be approved by Departmental staff.
4. Adequate steps shall be taken during and after construction activities to limit access to the site to appropriate personnel.

Additionally, adequate steps for preventing and monitoring any possible landfill decomposition gas migration within the proposed equipment building should be evaluated by the Housatonic Cable Vision Company or their design engineer.

If you should have any questions concerning this letter please contact David McKeegan of the Waste Engineering & Enforcement Division/Solid Waste Section at 566-5847.

Sincerely,



David A. Nash
Director
Engineering & Enforcement Division
Waste Management Bureau

DAN/DM/dkm

cc: Kenneth S. Heitzke, First Selectman, Town of Monroe

Byrne, Slater, Sandler, Shulman & Rouse, P.C.

Attorneys at Law
330 Main Street P.O. Box 3216
Hartford, Connecticut 06103

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May 3, 1990



HAND DELIVERED

MAY 3 1990
**CONNECTICUT
SITING COUNCIL**

Connecticut Siting Council
136 Main Street
Suite 401
New Britain, Connecticut 06051

Attention: Joel M. Rinebold, Executive Director

Re: Housatonic Cable Vision Company - Monroe Facility

Dear Mr. Rinebold:

Housatonic Cable Vision Company (the "Company") hereby withdraws the notice submitted pursuant to R.C.S.A. § 16-50j-73, dated April 20, 1990, with respect to its Monroe facility. The Company does not plan to make the noted modifications at the present time.

Please do not hesitate to contact me if there are any questions with respect to this matter. Thank you for your consideration.

Respectfully yours,

HOUSATONIC CABLE VISION COMPANY

By Jennifer Young Gaudet
Jennifer Young Gaudet
Its Attorney

cc: The Honorable Kenneth S. Heitzke, Selectman, Town of Monroe
(42)/55

Byrne, Slater, Sandler, Shulman & Rouse, P.C.

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APR 23 1990

CONNECTICUT
SITING COUNCIL

April 20, 1990

Connecticut Siting Council
136 Main Street
Suite 401
New Britain, Connecticut 06051

Attention: Joel M. Rinebold, Executive Director

Re: Housatonic Cable Vision Company - Notice Pursuant to R.C.S.A.
§ 16-50j-73 - Monroe Facility

Dear Mr. Rinebold:

Housatonic Cable Vision Company (the "Company") plans to install additional antennas at the existing CATV tower and head-end facility located in the Town of Monroe, Connecticut. Please accept this letter as notice of intent, pursuant to R.C.S.A. § 16-50j-73, to install associated equipment which constitutes an exempt modification pursuant to § 16-50j-72(b) of the Council's Rules of Practice.

The Company intends to install two quadrate channeler log-periodic antenna arrays for the purpose of receiving New York broadcast stations off-air. One four-antenna array, to be added at approximately the 95' level of the tower, will allow the Company to receive Channels 7, 9, 11 and 13. The second, to be added at approximately the 65' level of the tower, will allow the Company to receive Channels 2, 4 and 5. In addition, the Company will add one quadrate channeler log-periodic antenna at approximately the 65' level of the tower to receive Channel 8, WTNH-New Haven, off-air. The Company currently receives these channels via microwave from New Milford Cablevision Company's New Milford head-end site, where they are received off-air. The Company anticipates that receiving the signals off-air at Monroe will increase the quality and reliability of cable television service to subscribers in Monroe, Trumbull and parts of Newtown.

The Company respectfully submits that the addition of the proposed antennas constitutes an exempt modification, as defined in R.C.S.A. § 16-50j-72(b)(2). The addition of the antennas will not increase the height of the 140' tower or extend the boundaries of the tower site. The additional antennas will have no cognizable impact on noise levels at the tower site boundary;

BYRNE, SLATER, SANDLER, SHULMAN & ROUSE, P.C.

Connecticut Siting Council
April 20, 1990
Page 2

they do not generate noise. Nor will there be any increase in the total radio frequency electromagnetic radiation power density measured at the site boundary, because the additional antennas only receive off-air signals.

By copy of this letter, the Company is providing the chief elected official of the Town of Monroe written notice of its intent to construct an exempt modification to its facility in Monroe, as required by R.C.S.A. § 16-50j-73. The Company notes that its Monroe facility is located on property leased from the Town of Monroe.

Thank you for your consideration.

Respectfully yours,

HOUSATONIC CABLE VISION COMPANY

By Jennifer Young Gaudet
Jennifer Young Gaudet
Its Attorney

cc: The Honorable Kenneth S. Heitzke, Selectman, Town of Monroe
(42)/55

Byrne, Slater, Sandler, Shulman & Rouse, P.C.

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November 7, 1990

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CONNECTICUT
SITING COUNCIL

HAND-DELIVERED

Connecticut Siting Council
136 Main Street
Suite 401
New Britain, Connecticut 06051

Attention: Joel M. Rinebold, Executive Director

Re: Housatonic Cable Vision Company - Notice of Exempt
Modification - Monroe Facility

Dear Mr. Rinebold:

Housatonic Cable Vision Company ("Housatonic") notified the Council, by letter dated July 13, 1990, of plans to install associated equipment at its head-end facility in Monroe pursuant to the Council's rules pertaining to exempt modifications. At its meeting on July 25, 1990, the Council tabled consideration of the exempt modification pending receipt of certain additional information. The following information is provided in response thereto.

As approved in the Council's Docket No. 15, Housatonic leases its tower site from the Town of Monroe. Pursuant to the terms of the lease agreement between Housatonic and Monroe, Housatonic and Metro Mobile CTS of Fairfield County, Inc. ("Metro Mobile") have entered into a sublease which gives Metro Mobile the right to attach its antennas to Housatonic's tower and to construct an equipment shelter on the tower site. Housatonic has no right to enter into a sublease with Metro Mobile for property in which Housatonic has no legal interest. Metro Mobile's equipment shelter is located within the tower site, as defined by R.C.S.A. § 16-50j-2a(t), and no expansion of the tower site is required to accommodate the Metro Mobile building. Enclosed is a portion of a map of the Town of Monroe landfill property showing the Housatonic leased parcel and the location of the Metro Mobile equipment building within the leased parcel.

Connecticut Siting Council
November 7, 1990
Page 2

Prior to entering into the sublease agreement with Metro Mobile, a loading study of the tower was undertaken. Housatonic directed L&W Engineering Corp. ("L&W") to assess the capability of the tower to accommodate Metro Mobile's antennas, as well as certain additional antennas for use in Housatonic's cable system. It appeared, based on an oral report from L&W, that all antennas could be accommodated. Subsequently, Housatonic learned that L&W failed to take Housatonic's planned antennas into consideration. L&W has performed a second study, in accordance with Housatonic's original instructions. The study results indicate that two tower sections will require strengthening and that the size of the guy wires should be increased. A copy of the revised study and supplemental correspondence is enclosed. In addition, Metro Mobile plans to substitute four DB-809 antennas for the eight antennas previously planned; two each will be located at approximately the 103' and 140' levels of the tower. These antennas, which are 11-foot whip-type antennas, are approximately half the weight of those previously planned. A revised tower drawing, showing all planned antennas of Housatonic and Metro Mobile, is enclosed. All revisions continue to meet the Council's standards for exempt modifications.

At the request of the Town of Monroe, Metro Mobile requested review of its proposed building plan by the Solid Waste Management Unit of the Department of Environmental Protection ("DEP"). Enclosed is the DEP's letter, dated October 10, 1990, approving Metro Mobile's proposed construction. Pursuant to the lease agreement between Metro Mobile and Monroe, the Town has approval rights for any change to the tower. The Town has issued a building permit for the building; no other municipal approvals are required.

Should there be any further questions, please contact me. Thank you for your consideration.

Respectfully yours,

HOUSATONIC CABLE VISION COMPANY

By Jennifer Young Gaudet
Jennifer Young Gaudet
Its Attorney

Enclosures

cc: The Honorable Kenneth S. Heitzke, Selectman, Town of Monroe
(42)/25

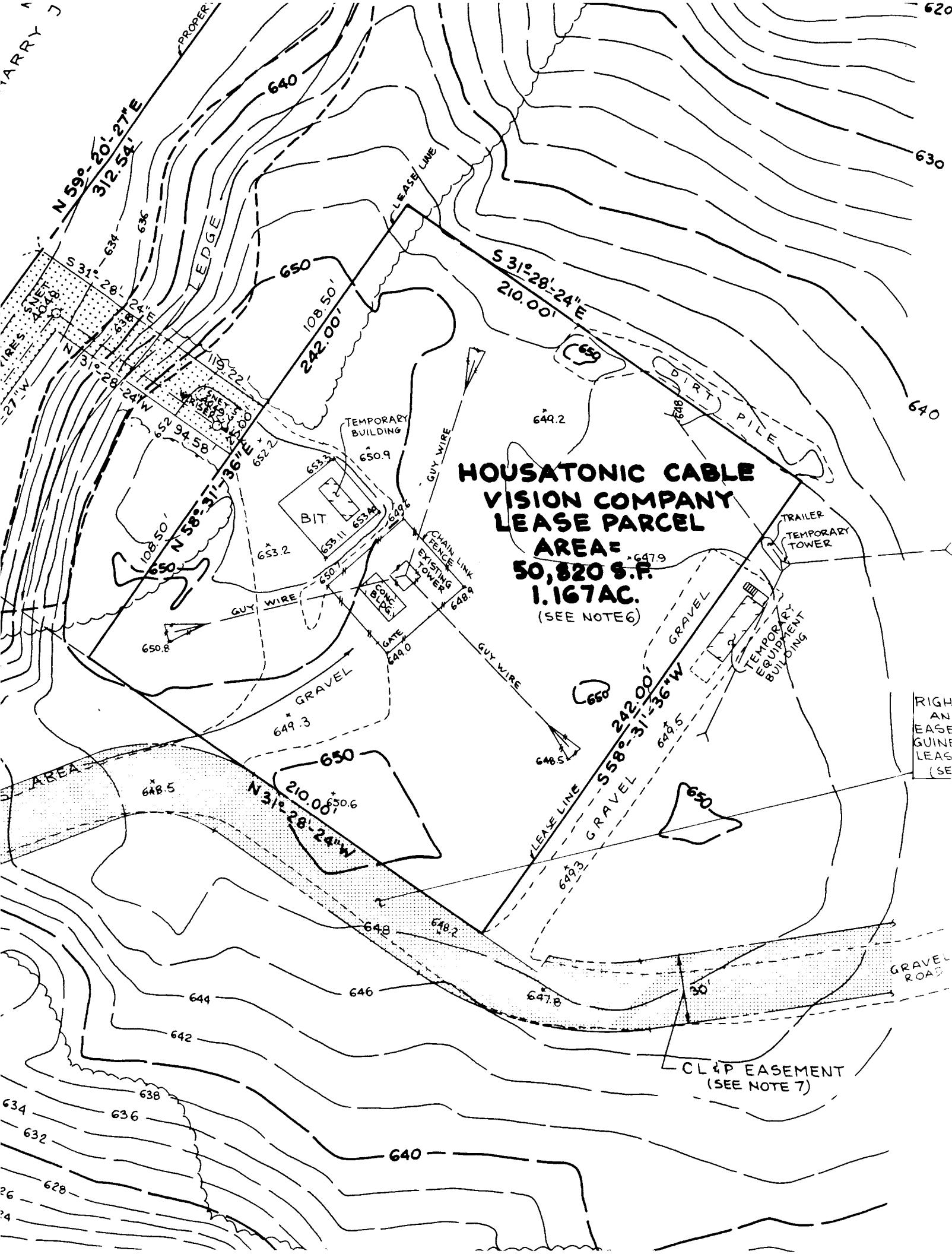
**HOUSATONIC CABLE
VISION COMPANY
LEASE PARCEL**

**AREA =
50,820 S.F.
1.167 AC.**

(SEE NOTE 6)

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CL&P EASEMENT
(SEE NOTE 7)



L&W ENGINEERING CORP.

75 Second Street • Dumont, New Jersey 07628 • (201) 384-0500

September 17, 1990

Mr. Robert Sereday Sr.
HOUSATONIC CABLE TV
2 East Street
New Milford, CN 06776

RE: MONROE HEAD END TOWER

Dear Mr. Sereday:

Enclosed please find our report of the analysis performed on the above referenced tower showing the results of adding the proposed head end antennas and 1 microwave dish.

This tower will support the additional weight of the proposed additional antennas, however, 2 sections of this tower will be overloaded during high winds and the AML receive antenna will surely suffer from severe fade and may even lose its path completely.

These problems can be corrected by strengthening the sections between 20' and 60' and increasing the guy wire sizes to allow greater tension and thus reducing the twist in the tower.

Should you desire to perform these changes, we will be happy to provide you with a quotation for engineering, drawings, field supervision, and certification.

We hope that this report fulfills your current needs.

If you have any questions, please feel free to contact me at 201-387-7700.

Thank you.

Very truly yours,
MIKAB CORPORATION


Perry M. Leonuk
Perry Leonuk

PL/ja
SEREDAY

REPORT OF ANALYSIS OF
140 FOOT EXISTING GUYED TOWER
OF
HOUSATONIC CABLEVISION
AT MONROE CONNECTICUT
BY

L & W ENGINEERING COMPANY
YULING CHANG P.E.

Yuling Chang
9/5/90

L & W Engineering Analysis Report
For Housatonic Cablevision 140 Ft.Tower

Purpose:

This is a re-analysis of an existing 140 foot guyed tower currently supporting one 10 ft Diameter Andrew P10-122E Microwave antenna located at the 132 ft level of the tower. six PD 1132 and two PD10017 Colliner antennas at 134 ft and 140 ft. levels. This analysis is due to the proposed addition of one 8 ft. dish at 90 ft., one QCS-7 at 90 ft., one QCA-7 antenna at 73 ft., one QCA-2 and one QCS-2-6 at 65 ft., and one QCA-UHF antenna at 55 ft. The structure is a three sided guyed tower consisting of Unarco-Rohn sections 83PC, 83P, 83PX and 84XTA, which are constructed using pipe legs and bracing. These sections are shown on the Tower elevation drawing on page 1. The existing tower member information was obtained from Unarco-Rohn drawing: B-690343, C-681228 and C-681229. The foundation information was obtained from the Ref. 7 and Unarco-Rohn drawing: C-610621

This analysis assumes the tower steel is in its original state with no deterioration due to weather or field modification.

REFERENCES:

1. Electronics Industries Association (EIA) Standard-222-D.
2. AISC Manual of Steel Construction eighth edition.
3. Unarco-Rohn Assembly Detail Drawings:

B690343	C681228	C681229	C720125
D750004	C860449		

4. Celwave Drawing: C-31880
5. Celwave Catalog for PD10017 antenna
6. Andrew Catalog 34 p.65
7. Paul K. Taormina P.E. Report to tower Foundation July 17, 1979
8. Richard P. Long P.E. Letter to Kemp Communications May 21 1984
9. Housatonic Cable Vision Monroe Tower Site Sketch Dated 6-15-90.

PROCEDURE:

The analysis of the tower was conducted using the LARSA computer program. LARSA is a finite element program that is designed for non-liner analysis of cable structures. The finite element computer model using a beam mode for the mast is detailed on page 1 through page 3. Both a linear analysis and a non-linear analysis were performed. The following load combination is considered:

- 1) D + Wo
- 2) D + 0.75Wi + I

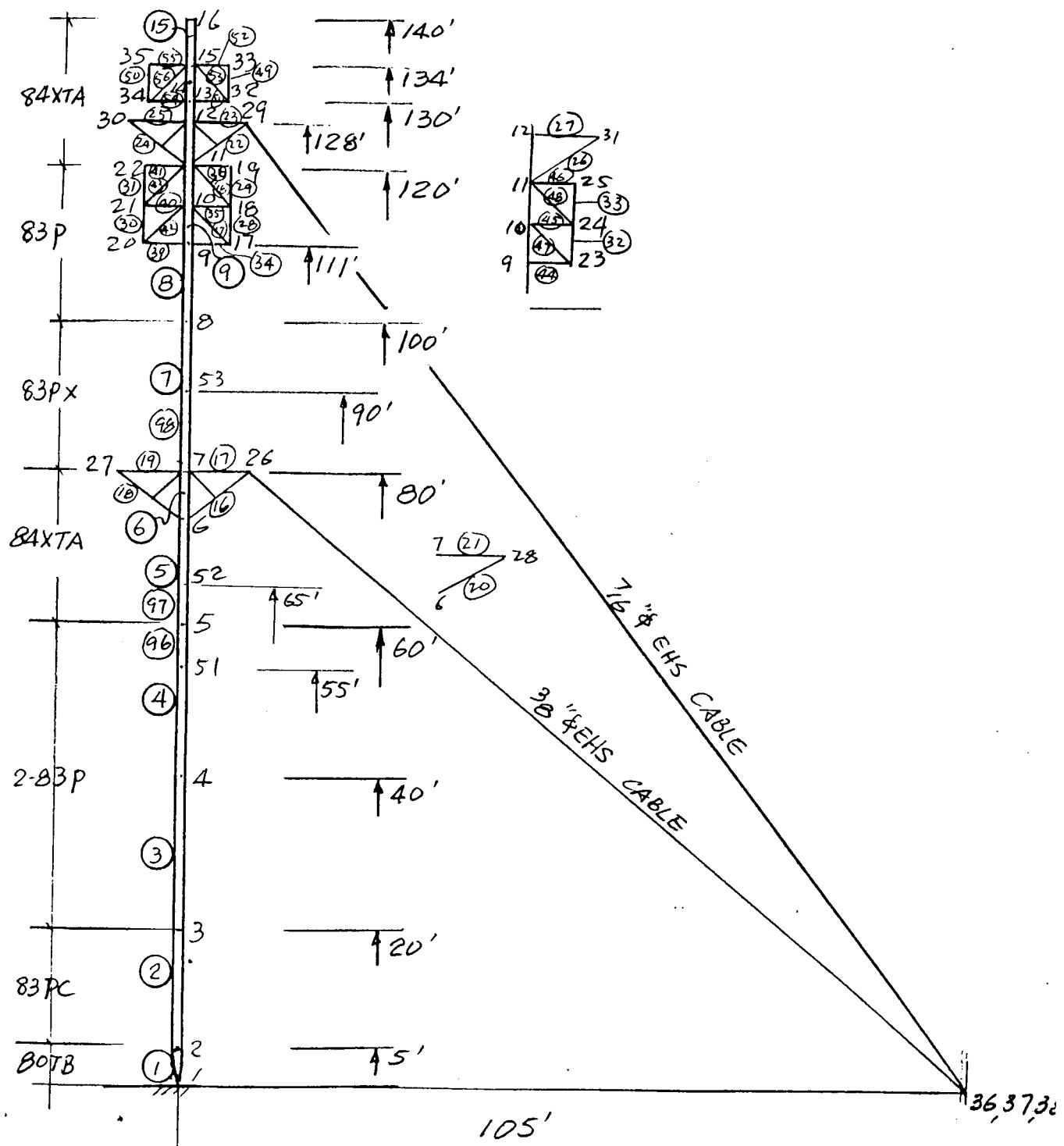
Where D is the dead load. Wo is the design wind load for the structure without ice. Wi is the design wind load with 1/2" radial ice on the tower member and I is the weight of the ice. The result was reviewed and each of maximum forced members was checked per AISC Code.

CONCLUSION:

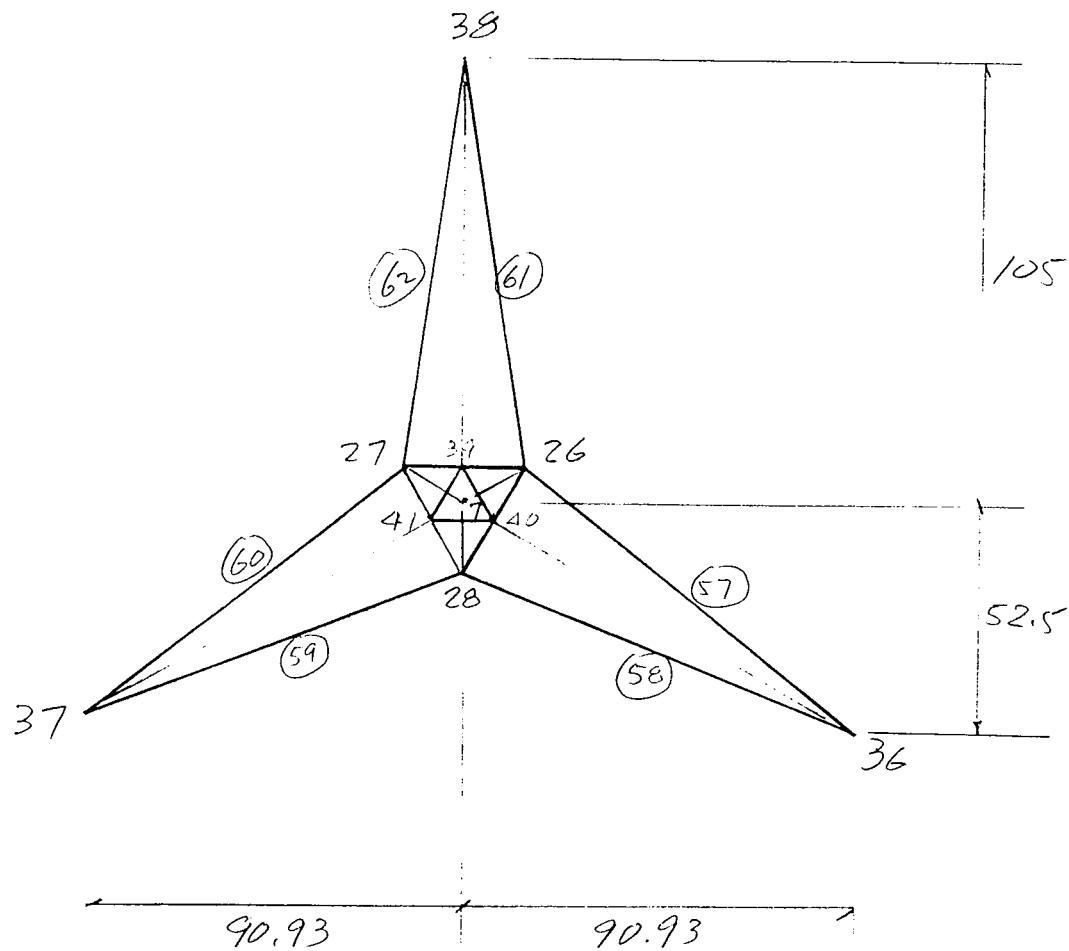
The result of this analysis indicates that the structural strength of most of the tower members meet the requirements of both Ref. 1 and 2 for an 85MPH wind with the exception of the area between the 20 ft. to 60 ft. sections. These sections are 83P and are over stressed during an ice load condition. The maximum deflection at the top of the tower is 0.063 inches at maximum wind load, which is acceptable. However, the tower twist is 0.85 degrees at maximum wind due to the developed twisting moment. This is greater than normal using a nominal 0.6 degree (-3dB) beam width of the above noted microwave antenna. The performance of the Microwave antenna will be degraded at high wind conditions resulting in a potential

signal fade of greater than -10 dB. The maximum foundation load is 26 kips which is less than the 44 kip design capacity of the CB6 tower base as shown on ref. 7. The maximum guy tension is 3.7 kips and maximum uplift at the guy anchor is 7.0 kips which is less than the 28.5 kip design capacity of the guy anchor GAC-57 8c block. Since re-tightening the guys approximately one year ago, no additional settlement has been observed. In my opinion this tower foundation should give adequate support for the existing and added antennas, however, the tower section 83P require some modification to meet the code requirements.

Subject <u>HOLUBATONIC CABLEVISION 140' Tower at Monroe</u>	Calc. No.	Rev. No	Sheet No. <u>1 of 15</u>
Originator <u>Y G</u>	Date <u>8-27-90</u>	Reviewed by	Date



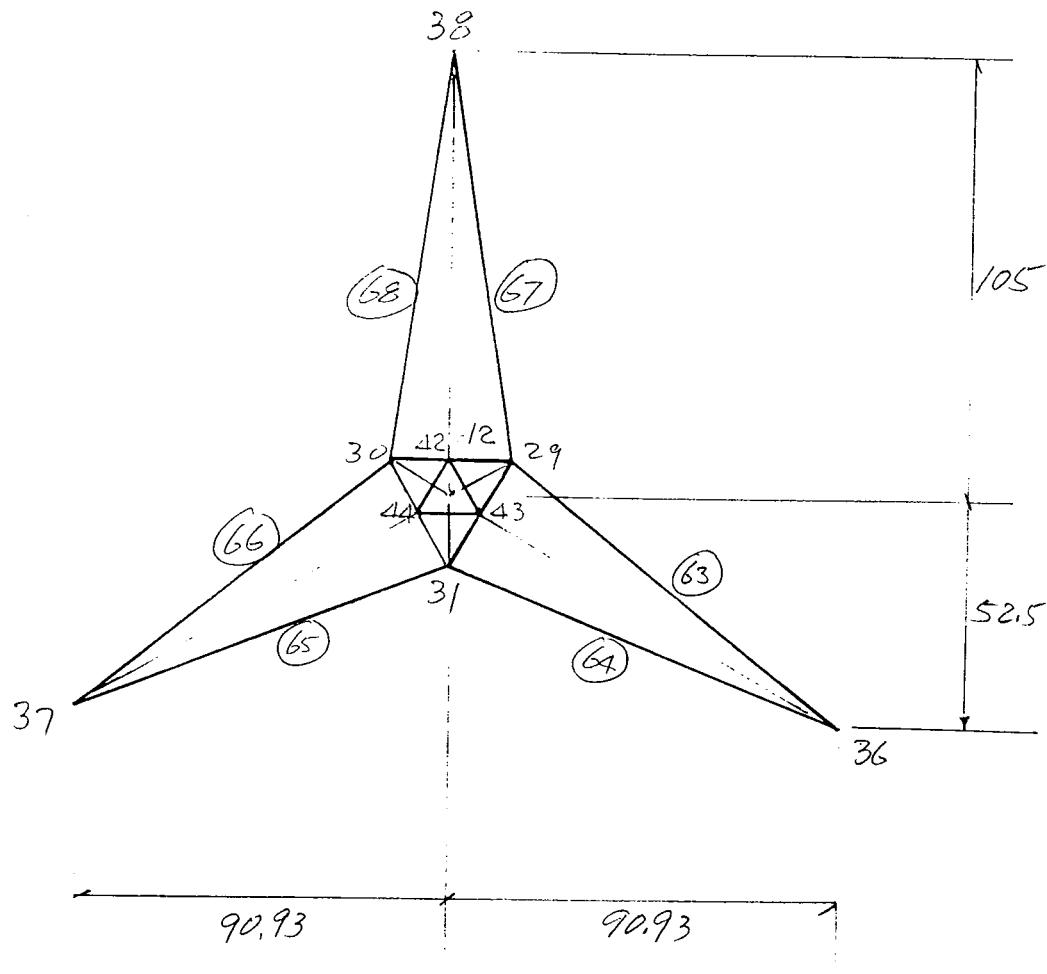
Subject Housatonic Cable Vision 140' Tower at Monroe	Calc. No. 90-	Rev. No.	Sheet No. 2 of 15
Originator YC	Date 8-27-90	Reviewed by	Date



L & W ENGINEERING

Calculation Sheet

Subject Housatonic Cable Vision 140' Tower at Monroe CT	Calc. No.	Rev. No.	Sheet No. <u>3 of 15</u>
Originator YC	Date 8-27-90	Reviewed by	Date



HOUATONIC CABLE VISION 140' GUYED TOWER

Originator

K77090

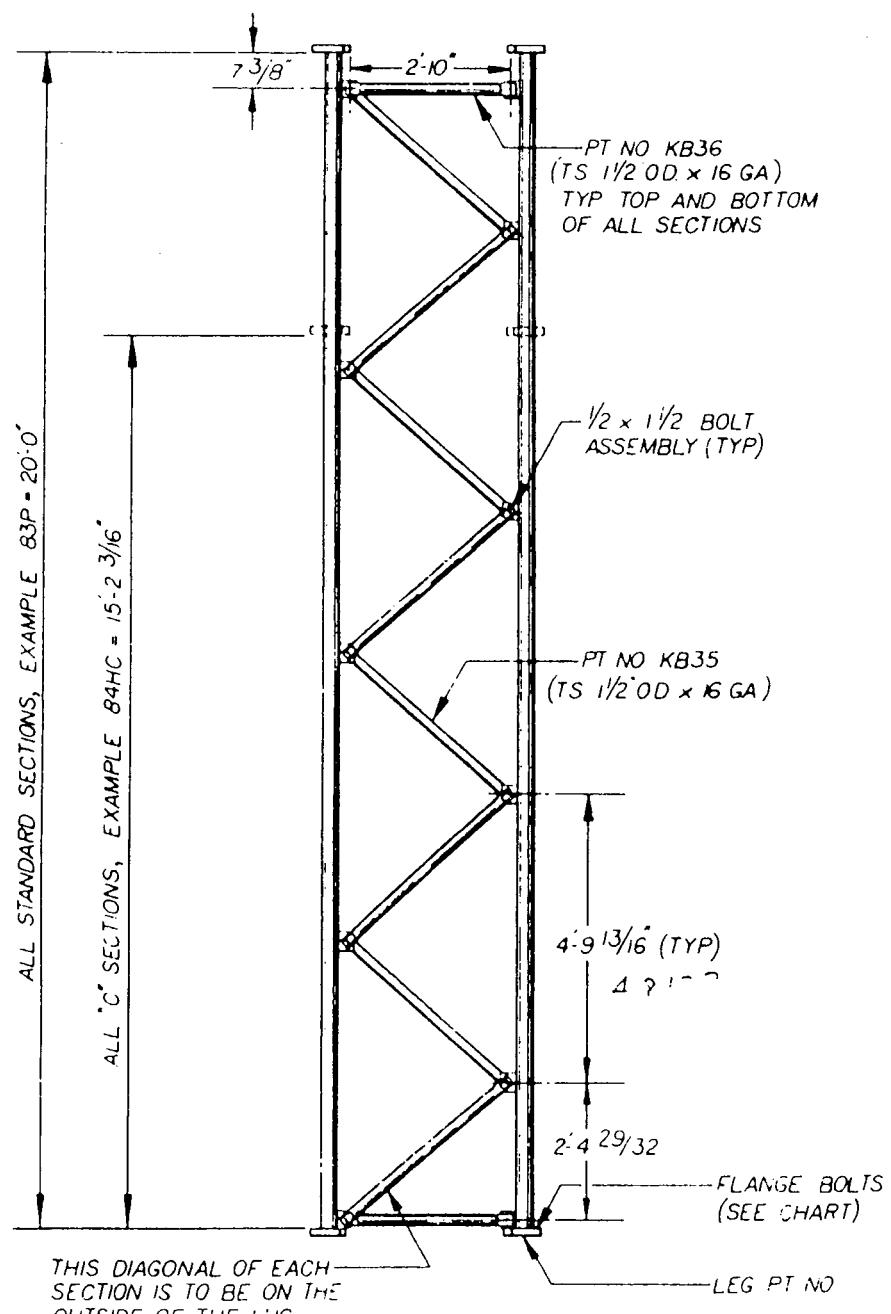
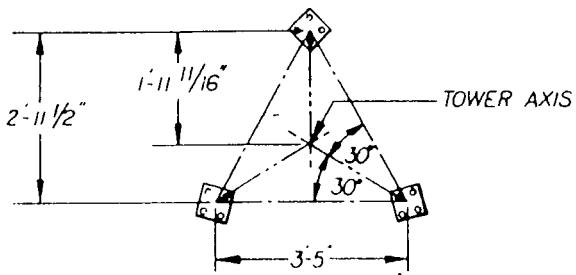
Date

8-37-90

Reviewed by

Date

4 of 15



ELEVATION VIEW

Subject Housatonic Cable Vision 140' Tower at Monroe CT	Calc. No.	Rev. No.	Sheet No. <u>5 of 15</u>
Originator YC	Date	Reviewed by	Date 09/01/90

PROPERTIES OF TOWER MAST 83P

$$\begin{aligned} \text{LEG MEMBER AREA} &= 1.07 \text{ IN}^2 \\ \text{I OF LEG MEMB. } I_z &= 0.67 \text{ IN}^4 \\ I_y &= 0.67 \text{ IN}^4 \end{aligned}$$

$$\text{RAD. GYRATION OF LEG} = 0.789 \text{ IN}$$

$$\text{LEG SPACE} = 41.00 \text{ IN}$$

$$\begin{aligned} \text{MAST AREA} &= 3 \times 1.070 = 3.21 \text{ IN}^2 \\ A &= 3 \times 1.070 = 3.21 \text{ IN}^2 \end{aligned}$$

$$\begin{aligned} \text{MOM. INER. } I &= 1.070 \times (41.00 / 2)^2 + 3 \times 0.67 \\ &= 901.3 \text{ IN}^4 \end{aligned}$$

RADIUS OF GYRATION =

$$r = (I/A)^{1/2} = 16.76 \text{ IN}^2$$

$$\text{DIAG. MEMB. AREA } A_d = 0.271 \text{ IN}^2$$

$$\text{RAD. GYRATION OF DIA.} = 0.509 \text{ IN}$$

$$\begin{aligned} \text{TORSION CONS. } J &= 3 \times A_d \times C^2 = 80.53 \text{ IN}^4 \\ J &= 3 \times A_d \times C^2 = 80.53 \text{ IN}^4 \end{aligned}$$

SLENDERNESS RATIO

TOWER MAST

$$L/R = 80.00 \times 12 / 16.757 = 57.3$$

DIAGONAL

$$L/R = 3.719 \times 12 / 0.509 = 87.7$$

LEG MEMBER

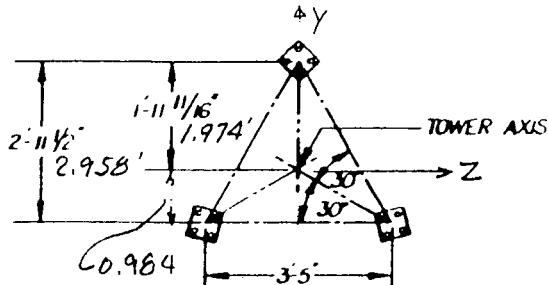
$$L/R = 4.818 \times 12 / 0.789 = 73.3$$

ALLOWABLE MOMENT OF TOWER MAST FOR 30 KSI STEEL

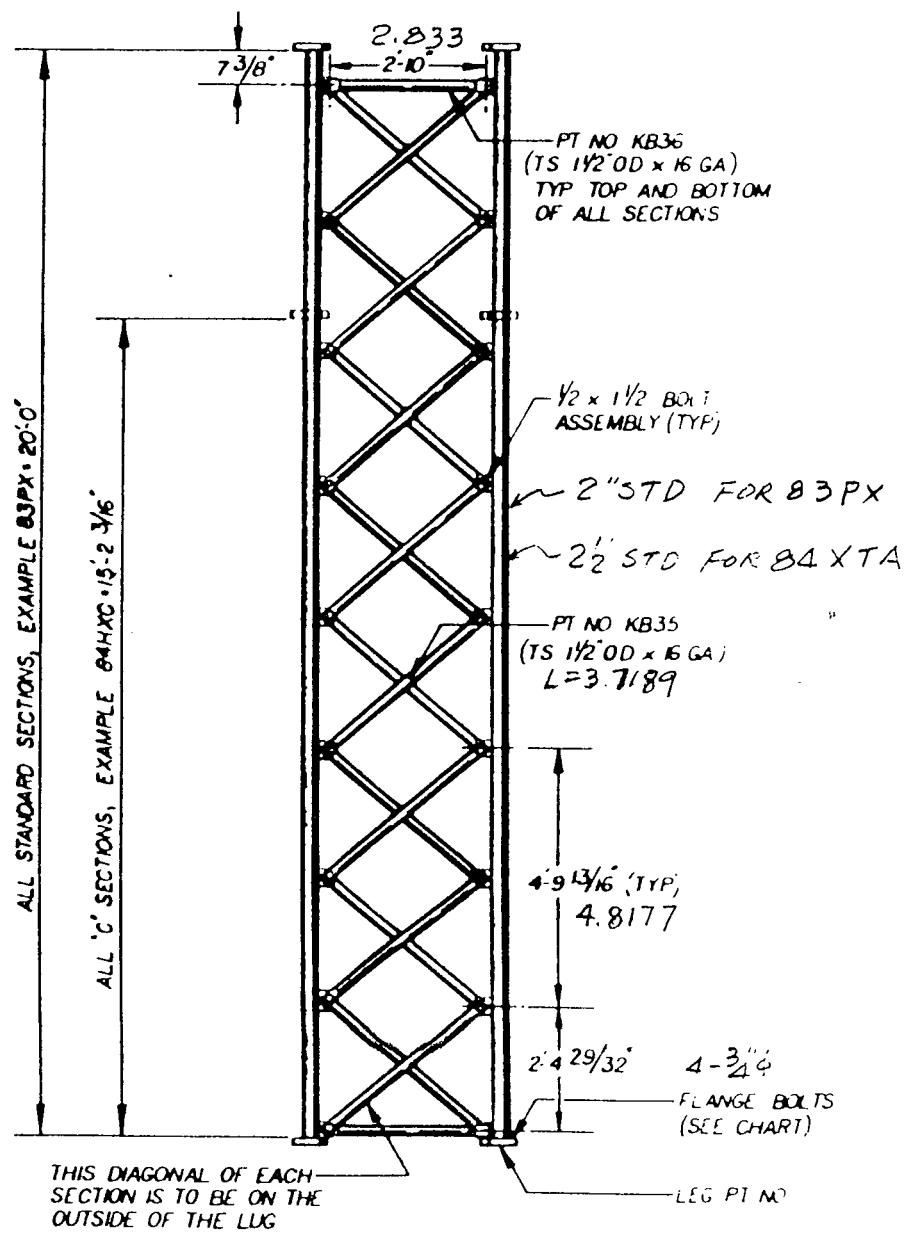
$$M_r = F * I/C = 44.28 \text{ FT-KIP}$$

Calculation Sheet

Subject HOUSATONIC CABLEVISION 140' GUYED TOWER AT MONROE	Calc. No.	Rev. No.	Sheet No. 6 of 15
Originator	Date 8-27-90	Reviewed by	Date



PLAN VIEW



ELEVATION VIEW

Subject Housatonic Cable Vision 140' Tower at Monroe CT	Calc. No.	Rev. No.	Sheet No. <u>7 of 15</u>
Originator YC	Date	Reviewed by	Date 09/01/90

PROPERTIES OF TOWER MAST 83PX

LEG MEMBER AREA = 1.07 IN²
I OF LEG MEMB. I_Z = 0.67 IN⁴
I_Y = 0.67 IN⁴

RAD. GYRATION OF LEG = 0.789 IN

LEG SPACE = 41.00 IN

MAST AREA A = 3 X 1.070 = 3.21 IN²

MOM. INER. I = 1.070 X (41.00 /2)² + 3 X 0.67⁴
= 901.3 IN

RADIUS OF GYRATION =

r = (I/A) ^1/2 = 16.76 IN

DIAG. MEMB. AREA Ad = 0.542 IN²

RAD. GYRATION OF DIA. = 0.509 IN

TORSION CONS. J J = 3 X Ad X C^2 = 161.05 IN⁴

SLENDERNESS RATIO

TOWER MAST L/R = 48.00 X 12 / 16.757 = 34.4

DIAGONAL L/R = 1.859 X 12 / 0.509 = 43.8

LEG MEMBER L/R = 2.409 X 12 / 0.789 = 36.6

ALLOWABLE MOMENT OF TOWER MAST FOR 30 KSI STEEL

Mr = F*I/C = 52.07 FT-KIP

Subject		Calc. No.	Rev. No.	Sheet No.
Housatonic CableVision 140' Tower at Monroe Ct.				
Originator	Date	Reviewed by	Date	8 of 15
YC			09/01/90	

PROPERTIES OF TOWER MAST 84XTA

$$\text{LEG MEMBER AREA} = 1.70 \text{ IN}^2$$

$$I \text{ OF LEG MEMB. } I_z = 1.53 \text{ IN}^4$$

$$I_y = 1.53 \text{ IN}^4$$

$$\text{RAD. GYRATION OF LEG} = 0.949 \text{ IN}$$

$$\text{LEG SPACE} = 41.00 \text{ IN}$$

$$\text{MAST AREA} = A = 3 \times 1.700 = 5.10 \text{ IN}^2$$

$$\text{MOM. INER. } I = 1.700 \times (41.00/2)^2 + 3 \times 1.53^4 = 1433.4 \text{ IN}^4$$

RADIUS OF GYRATION =

$$r = (I/A)^{1/2} = 16.77 \text{ IN}$$

$$\text{DIAG. MEMB. AREA } A_d = 0.542 \text{ IN}^2$$

$$\text{RAD. GYRATION OF DIA.} = 0.509 \text{ IN}$$

$$\text{TORSION CONS. } J = 3 \times A_d \times C^2 = 161.05 \text{ IN}^4$$

SLENDERNESS RATIO

TOWER MAST

$$L/R = 80.00 \times 12 / 16.765 = 57.3$$

DIAGONAL

$$L/R = 1.859 \times 12 / 0.509 = 43.8$$

LEG MEMBER

$$L/R = 2.409 \times 12 / 0.949 = 30.5$$

ALLOWABLE MOMENT OF TOWER MAST FOR 30 KSI STEEL

$$M_r = F \cdot I/C = 76.31 \text{ FT-KIP}$$

Subject		Calc. No.	Rev. No.	Sheet No.
Housatonic Cablevision 140' Tower at Monroe				9 of 15
Originator	Date	Reviewed by	Date	
YC	8-30-90			

WIND LOAD CALCULATION PER. EIA-222-D

HORIZONTAL WIND FORCE

$$F = qz \cdot Gh \cdot [Cf \cdot Ae + (Ca \cdot Aa)]^{1/6}$$

BUT NOT TO EXCEED 2 qz Gh Ag

$$\text{WHERE } Ae = (Df \cdot Af + Dr \cdot Ar \cdot Rr) \text{ ft}^2$$

$$F = qz \cdot Gh \cdot [Cf \cdot (Df \cdot Af + Dr \cdot Ar \cdot Rr) + (Ca \cdot Aa)]^{1/6}$$

FOR BASIC WIND SPEED = V MPH.

HEIGHT OF TOWER = H FT.

$$z = H/2 \text{ FT.}$$

$$Kz = (z / 33)^{2/7}$$

$$qz = 0.00256 \cdot Kz \cdot V^{2 \frac{1}{6}/\text{ft}^2}$$

$$\text{GUST FACTOR } Gh = 0.65 + \frac{0.6}{(H / 33)^{1/7}}$$

$$1.0 < Gh < 1.25$$

$$e = (Af + Ar) / Ag$$

$$Cf = 4.0 e^2 - 5.9 e + 4.0 \quad (\text{FOR SQUARE SECTION})$$

$$Cf = 3.4 e^2 - 4.7 e + 3.4 \quad (\text{FOR TRIANGULAR SECTION})$$

$$Rr = 0.51 e^2 + 0.57$$

FOR qz Gh Af or qz Gh Ar SEE SHEET

FOR Cf SEE SHEET

Subject <u>Housatonic CableVision 140' Tower at Monroe CT</u>	Calc. No.	Rev. No.	Sheet No. <u>10 of 15</u>
Originator <u>YC</u>	Date <u>8-30-90</u>	Reviewed by	Date

TOWER MAST WIND LOAD CALCULATION						
HOUSATONIC CABLE VISION 140 FT TOWER AT MONROE CT.						
TOWER HIGH		H 140.00 FT.				
WIND SPEED		V 85.00 MPH				
GUST FACTOR		Gh 1.14				
VELOCITY PRE.		qz 22.929 PSF				
ICE THICKNESS		It 0.50 IN				
WIND LOAD ON TOWER SECTION						
SECT MARK	SECT HIGHT FT	Cf	WIND FORCE 1b/FT	Rr	Cf/I	WIND WITH ICE 75%FORCE Rr/I 1b/FT
84XTA	20.00	2.461	34.13	0.600	2.162	47.36 0.634
83PX	20.00	2.524	31.46	0.595	2.206	44.81 0.627
84	20.00	2.614	28.61	0.589	2.361	38.77 0.609
83P	20.00	2.686	25.78	0.585	2.417	36.17 0.604

Subject Housatonic Cable Vision 140' Tower at Monroe C.T.	Calc. No.	Rev. No.	Sheet No. 11 of 15
Originator YC	Date 8-30-90	Reviewed by	Date

1
2
3
4

5 ICE & WIND LOAD CALCULATION

6 HOUSATONIC CABLE VISION 140 FT TOWER AT MONROE

7
8 TOWER HEIGHT(Ft) H= 140.00
9 WIND SPEED(MPH) V= 85.00
10 ICE THICKNESS It= 0.50
11 EXPOSURE Coe. Kz= 1.2397
12 GUST factor Gh= 1.1381
13 VELOCITY Pre. qz= 22.9291

14
15 WIND PRESSURE (qz * Gh * D)

16 MEMBER SIZE	17 WIDTH in.	18 MEMBER WEIGHT lb/FT	19 WIND LOAD Wo lb/FT	20 WIND/ICE .75Wi lb/FT	21 ICE LOAD I lb/FT
CB3/8	0.375	0.273	0.815	2.243	0.535
CB7/16	0.438	0.399	0.951	2.344	0.573
COX1/2	0.630	0.150	1.370	2.658	0.690
COX7/8	1.090	0.330	2.370	3.409	0.971
PIP15	1.900		4.132	4.730	1.466
PIP20	2.375		5.165	5.504	1.756
PIP25	2.875		6.252	6.320	2.062

25
26 WIND FORCE qz*Gh*(Cf*Af) or qz*Gh*(Cf*Ar*Rr)

27 MEMBER TYPE	28 Cf	29 Rr	30 WIND LOAD Wo 1b/FT	31 Cf/I	32 Rr/I	33 WIND/ICE .75Wi 1b/FT
CB3/8	1.2	1	0.979	1.20	1	2.691
CB7/16	1.2	1	1.142	1.20	1	2.813
COX1/2	2.64	0.59	2.134	2.40	0.61	3.892
COX7/8	2.64	0.59	3.692	2.40	0.61	4.990
PIP15	2.64	0.59	6.436	2.40	0.61	6.924
PIP20	2.64	0.59	8.045	2.40	0.61	8.059
PIP25	2.64	0.59	9.738	2.40	0.61	9.252

Subject Housatonic CableVision 140' Tower at Monroe CT	Calc. No.	Rev. No.	Sheet No. <u>12 of 15</u>
Originator YB	Date 8-30-90	Reviewed by	Date

1	ANTENNA LOAD FOR
2	WIND SPEED AT 85 MPH
3	
4	
5	
6	ANTENNA LOAD FOR
7	WIND SPEED AT 85 MPH
8	
9	
10	ANTENNA ANTENNA LATERAL BENDING DISH
11	WEIGHT THRUST MOMENT TORQUE
12	TYPE WT Wo Wm Mt
13	PD 1132 63 173 795
14	PD 10017 25 58 347
15	QCA-2 76 152 782
16	QCA-7 31 87 318
17	QCA-UHF 21 14 29
18	QCS-2-6 852 399 1954
19	QCS-7 229 153 536
20	8FT-DIA 447 1741 -2428
21	10FT-DIA 541 2720 -4257
22	UCA-8 117 1024 1229
23	
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Subject		Calc. No.	Rev. No.	Sheet No.
Housatonic Cablevision 140' Guyed Tower at Monroe				13 of 15
Originator	Date	Reviewed by	Date	
YC	9-3-90			

1				
2	Check Displacement at Dish			
3				
4	10' Dish at Node 14			
5	Rotation = .01497 rad			
6				
7	or. = 0.857°			
8				
9				
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14				
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16				
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Subject <u>Housatonic Cable Vision 140' TOWER AT MONROE</u>	Calc. No.	Rev. No.	Sheet No. <u>14 of 15</u>
Originator Date <u>9-3-90</u>	Reviewed by	Date <u>08/03/90</u>	

FOUNDATION CAPACITY (TYPE A)

SOIL INFORMATION:

(Std. Normal Soil Assumed If Not Given)

ALLOW. BEARING P_a = PSFANGLE of FRIC. ϕ = DEG.

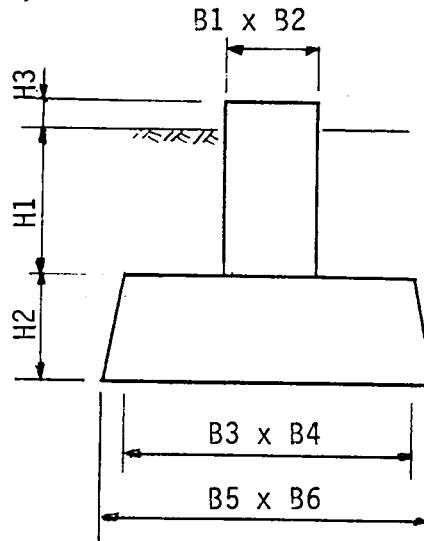
FOUNDATION LOAD:

 F_x = 0.00 Kips F_y = 25.75 Kips F_z = 2.55 Kips M_x = 0.00 Kip-ft M_y = 0.00 Kip-ft M_z = 0.00 Kip-ft

WIDTH

 B_1 = 2.00 FT. B_2 = FT. B_3 = 4.50 FT. B_4 = FT. B_5 = 4.50 FT. B_6 = FT.

DEPTH

 H_1 = 2.75 FT. H_2 = 1.25 FT. H_3 = 0.50 FT.CONCRETE WEIGHT W_c = 5.75 KipsSOIL WEIGHT W_s = 9.32 KipsALLOWABLE UPLIFT U_p = $W_s/2 + W_c/1.25$ = 9.26 Kips > 0.00 NAALLOWABLE LATERAL FORCE L_p = 19.61 Kips > 2.55 OKALLOWABLE VERTICAL LOAD P = 70.8 Kips > 25.75 OKMAXIMUM BEARING P_b = 2.5 KSF < 4.00 OKMINIMUM BEARING P_b = 1.0 KSF OKFACTOR OF SAFETY AGAINST OVERTURNING $F.S.$ = 7.1 OKVOLUME OF CONC. V_c = 1.4 Cu.Yd

Subject HOUSATONIC CABLEVISION 140' TOWER AT MONROE	Calc. No.	Rev. No.	Sheet No. <u>15 of 15</u>
Originator Date 9-3-90	Reviewed by	Date 09/03/90	

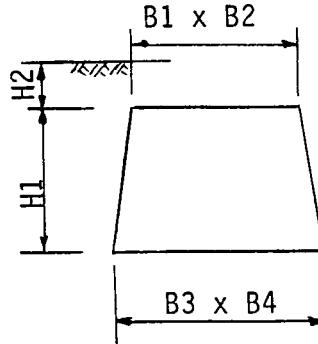
GUYED ANCHOR CAPACITY (TYPE B)

SOIL INFORMATION:

(Std. Normal Soil Assumed If Not Given)

ALLOW. BEARING P_a = PSFANGLE of FRIC. θ = DEG.

FOUNDATION LOAD:

 F_x = -6.53 Kips F_y = -7.00 Kips F_z = Kips

WIDTH

 B_1 = 6.00 FT. B_2 = 4.00 FT. B_3 = 6.00 FT. B_4 = 4.00 FT.

DEPTH

 H_1 = 2.50 FT. H_2 = 5.50 FT.CONCRETE WEIGHT W_c = 9.00 KipsSOIL WEIGHT W_s = 42.40 KipsALLOWABLE UPLIFT $U_p = W_s/2 + W_c/1.25 = 28.40$ Kips > 7.00 OKALLOWABLE LATERAL FORCE $L_p = 27.00$ Kips > 6.53 OKALLOWABLE VERTICAL FDN. LOAD $P = 73.8$ Kips > 0.00 OK

OVERTURNING NOT APPLY

VOLUME OF CONC. V_c = 2.2 Cu.Yd.

F:\MONROE\MORO

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

PARameter

Prepared on 02-09-199 at 22:29

Page: 0001

L & W ENGINEERING

Members	=	95
Joints	=	53
Elastic Supports	=	0
Materials	=	1
Bars	=	13
Cycles	=	0
Units	=	2
Loads	=	4
Combinations	=	0
Isol	=	0
Icable	=	0
Iout	=	3
Idtch	=	0
Ldstep	=	0
Idpt	=	0
Irccn	=	1
Idyn	=	0
Newnm	=	0
I	=	81
NSpr	=	0

ATTACHED SHAPE TABLES:

UNITS:

PROPERTY LENGTHS=FT
MATERIAL LENGTHS=FT
MATERIAL FROCES =LB
MATERIAL TEMP =FAH
NODE LENGTHS =FT
SPRING LENGTHS =FT
SPRING FORCES =LB
LOAD LENGTHS =FT
LOAD FORCES =LB
LOAD TEMP =FAH

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

MATERIAL Prepared on 02-09-199 at 22:29 Page: 0002

L & W ENGINEERING

Matl#	Youngs Modulus	Poissons Ratio	Density	Thermal Coeff.
1	.2900000E+08	.3000000	.4900000	.0000000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

NODE

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

Default Constraint:

Node#	X-coord	Y-coord	Z-coord	-----	Constraints	-----	I-Sys	O-Sys	Re.
1	.0000	.0000	.0000	X_T Y_T Z_T X_R Y_R Z_R		0	0	Y	
2	.0000	4.8300	.0000			0	0	N	
3	.0000	20.0000	.0000			0	0	N	
4	.0000	40.0000	.0000			0	0	N	
5	.0000	60.0000	.0000			0	0	N	
6	.0000	72.0000	.0000			0	0	N	
7	.0000	80.0000	.0000			0	0	N	
8	.0000	100.0000	.0000			0	0	N	
9	.0000	111.0000	.0000			0	0	N	
10	.0000	115.5000	.0000			0	0	N	
11	.0000	120.0000	.0000			0	0	N	
12	.0000	128.0000	.0000			0	0	N	
13	.0000	130.0000	.0000			0	0	N	
14	.0000	132.0000	.0000			0	0	N	
15	.0000	134.0000	.0000			0	0	N	
16	.0000	140.0000	.0000			0	0	N	
17	5.1960	111.0000	3.0000			0	0	N	
18	5.1960	115.5000	3.0000			0	0	N	
19	5.1960	120.0000	3.0000			0	0	N	
20	-5.1960	111.0000	3.0000			0	0	N	
21	-5.1960	115.5000	3.0000			0	0	N	
22	-5.1960	120.0000	3.0000			0	0	N	
23	.0000	111.0000	-6.6000			0	0	N	
24	.0000	115.5000	-6.6000			0	0	N	
25	.0000	120.0000	-6.6000			0	0	N	
26	5.5750	80.0000	-3.2200			0	0	N	
27	-5.5750	80.0000	-3.2200			0	0	N	
28	.0000	80.0000	6.4370			0	0	N	
29	5.5750	128.0000	-3.2200			0	0	N	
30	-5.5750	128.0000	-3.2200			0	0	N	
31	.0000	128.0000	6.4370			0	0	N	
32	5.1960	130.0000	3.0000			0	0	N	
33	5.1960	134.0000	3.0000			0	0	N	
34	-5.1960	130.0000	3.0000			0	0	N	
35	-5.1960	134.0000	3.0000			0	0	N	
36	90.9300	.0000	52.5000	X_T Y_T Z_T X_R Y_R Z_R		0	0	Y	
37	-90.9300	.0000	52.5000	X_T Y_T Z_T X_R Y_R Z_R		0	0	Y	
38	.0000	.0000	-105.0000	X_T Y_T Z_T X_R Y_R Z_R		0	0	Y	
39	.0000	80.0000	-1.9740			0	0	N	
40	1.7080	80.0000	.9840			0	0	N	

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

NODE

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

Node#	X-coord	Y-coord	Z-coord	-----	Constraints	-----	I-Sys	O-Sys	Re
41	-1.7080	80.0000	.9840				0	0	N
42	.0000	128.0000	-1.9740				0	0	N
43	1.7080	128.0000	.9840				0	0	N
44	-1.7080	128.0000	.9840				0	0	N
45	.0000	72.0000	-1.9740				0	0	N
46	1.7080	72.0000	.9840				0	0	N
47	-1.7080	72.0000	.9840				0	0	N
48	.0000	120.0000	-1.9740				0	0	N
49	1.7080	120.0000	.9840				0	0	N
50	-1.7080	120.0000	.9840				0	0	N
51	.0000	55.0000	.0000				0	0	N
52	.0000	65.0000	.0000				0	0	N
53	.0000	90.0000	.0000				0	0	N

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

ELEMENT

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

Elem#	INod	JNod	Desig.	Type	Length	MID	YI	ZI	YJ	ZJ	Vx	Vy	Vz
1	1	2	80TB	BEAm	4.83	1	1	1			-1.00	.00	.00
2	2	3	83P	BEAm	15.17	1					-1.00	.00	.00
3	3	4	83P	BEAm	20.00	1					-1.00	.00	.00
4	4	51	83P	BEAm	15.00	1					-1.00	.00	.00
5	52	6	84XTA	BEAm	7.00	1					-1.00	.00	.00
6	6	7	84XTA	BEAm	8.00	1					-1.00	.00	.00
7	53	8	83PX	BEAm	10.00	1					-1.00	.00	.00
8	8	9	83P	BEAm	11.00	1					-1.00	.00	.00
9	9	10	83P	BEAm	4.50	1					-1.00	.00	.00
10	10	11	83P	BEAm	4.50	1					-1.00	.00	.00
11	11	12	84XTA	BEAm	8.00	1					-1.00	.00	.00
12	12	13	84XTA	BEAm	2.00	1					-1.00	.00	.00
13	13	14	84XTA	BEAm	2.00	1					-1.00	.00	.00
14	14	15	84XTA	BEAm	2.00	1					-1.00	.00	.00
15	15	16	84XTA	BEAm	6.00	1					-1.00	.00	.00
16	46	26	PIP20	BEAm	9.83	1					.00	1.00	.00
17	40	26	PIP20	BEAm	5.71	1					.00	1.00	.00
18	45	27	PIP20	BEAm	9.83	1					.00	1.00	.00
19	39	27	PIP20	BEAm	5.71	1					.00	1.00	.00
20	47	28	PIP20	BEAm	9.83	1					.00	1.00	.00
21	41	28	PIP20	BEAm	5.71	1					.00	1.00	.00
22	49	29	PIP20	BEAm	9.83	1					.00	1.00	.00
23	43	29	PIP20	BEAm	5.71	1					.00	1.00	.00
24	48	30	PIP20	BEAm	9.83	1					.00	1.00	.00
25	42	30	PIP20	BEAm	5.71	1					.00	1.00	.00
26	50	31	PIP20	BEAm	9.83	1					.00	1.00	.00
27	44	31	PIP20	BEAm	5.71	1					.00	1.00	.00
28	17	18	PIP20	BEAm	4.50	1					-1.00	.00	.00
29	18	19	PIP20	BEAm	4.50	1					-1.00	.00	.00
30	20	21	PIP20	BEAm	4.50	1					-1.00	.00	.00
31	21	22	PIP20	BEAm	4.50	1					-1.00	.00	.00
32	23	24	PIP20	BEAm	4.50	1					-1.00	.00	.00
33	24	25	PIP20	BEAm	4.50	1					-1.00	.00	.00
34	9	17	PIP20	BEAm	6.00	1					.00	1.00	.00
35	10	18	PIP20	BEAm	6.00	1					.00	1.00	.00
36	11	19	PIP20	BEAm	6.00	1					.00	1.00	.00
37	10	17	L15	TRUs	7.50	1					.00	.00	.00
38	11	18	L15	TRUs	7.50	1					.00	.00	.00
39	9	20	PIP20	BEAm	6.00	1					.00	1.00	.00
40	10	21	PIP20	BEAm	6.00	1					.00	1.00	.00

E:\MONROE\MORO

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

Prepared on 02-09-199 at 22:29 Page: 0006

L & W ENGINEERING

C:\MONROE\MORO

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

ELEMENT

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

Elem#	INod	JNod	Desig.	Type	Length	MID	YI	ZI	YJ	ZJ	Vx	Vy	Vz
69	7	39	LINK	BEAm	1.97	1					.00	1.00	.00
70	7	40	LINK	BEAm	1.97	1					.00	1.00	.00
71	7	41	LINK	BEAm	1.97	1					.00	1.00	.00
72	12	42	LINK	BEAm	1.97	1					.00	1.00	.00
73	12	43	LINK	BEAm	1.97	1					.00	1.00	.00
74	12	44	LINK	BEAm	1.97	1					.00	1.00	.00
75	39	26	PIP20	BEAm	5.71	1					.00	1.00	.00
76	41	27	PIP20	BEAm	5.71	1					.00	1.00	.00
77	40	28	PIP20	BEAm	5.71	1					.00	1.00	.00
78	42	29	PIP20	BEAm	5.71	1					.00	1.00	.00
79	44	30	PIP20	BEAm	5.71	1					.00	1.00	.00
80	43	31	PIP20	BEAm	5.71	1					.00	1.00	.00
81	6	45	LINK	BEAm	1.97	1					.00	1.00	.00
82	6	46	LINK	BEAm	1.97	1					.00	1.00	.00
83	6	47	LINK	BEAm	1.97	1					.00	1.00	.00
84	11	48	LINK	BEAm	1.97	1					.00	1.00	.00
85	11	49	LINK	BEAm	1.97	1					.00	1.00	.00
86	11	50	LINK	BEAm	1.97	1					.00	1.00	.00
87	45	26	PIP20	BEAm	9.83	1					.00	1.00	.00
88	47	27	PIP20	BEAm	9.83	1					.00	1.00	.00
89	46	28	PIP20	BEAm	9.83	1					.00	1.00	.00
90	48	29	PIP20	BEAm	9.83	1					.00	1.00	.00
91	50	30	PIP20	BEAm	9.83	1					.00	1.00	.00
92	49	31	PIP20	BEAm	9.83	1					.00	1.00	.00
96	51	5	83P	BEAm	5.00	1					-1.00	.00	.00
97	5	52	84XTA	BEAm	5.00	1					-1.00	.00	.00
98	7	53	83PX	BEAm	10.00	1					-1.00	.00	.00

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

Property Prepared on 02-09-199 at 22:29 Page: 0008

L & W ENGINEERING

Prop Desig.	Area	Izz	Iyy	J	B1	D1	B2	D
1 80TB	6.76	1895.00	1895.00	22.66	.000	.000	.0	.0
2 83P	3.21	900.00	900.00	22.66	.000	.000	.0	.0
3 83PX	3.21	900.00	900.00	22.66	.000	.000	.0	.0
4 84XTA	5.10	1433.00	1433.00	22.66	.000	.000	.0	.0
5 CB716	.15	.00	.00	.00	.000	.000	.0	.0
6 CB38	.11	.00	.00	.00	.000	.000	.0	.0
7 PIP20	1.07	.67	.67	1.00	.000	.000	.0	.0
8 L15	.42	.13	.13	.01	.000	.000	.0	.0
9 LINK	3.21	100.00	100.00	50.00	.000	.000	.0	.0
10 CB7	.15	.00	.00	.00	.000	.000	.0	.0
11 83P	3.21	900.00	900.00	80.50	41.000	35.500	.0	.0
12 84XTA	5.10	1433.00	1433.00	161.00	41.000	35.500	.0	.0
13 83PX	3.21	900.00	900.00	161.00	41.000	35.500	.0	.0

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

LCDefinition Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

DEAD LOAD + WEIGHT

Joint	=	7
Member	=	0
Elem Temp	=	0
Node Temp	=	0
Plate	=	0
Body force multiplier	=	-1.000
Direction	=	Y
Non-Linear multiplier	=	.000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

NL0ad

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

DEAD LOAD + WEIGHT

Node#	X-Force	Y-Force	Z-Force	X-Moment	Y- Moment	Z-Moment
14	.0000	-1.0000	.0000	.0000	.0000	.0000
16	.0000	-.0250	.0000	.0000	.0000	.0000
18	.0000	-.1260	.0000	.0000	.0000	.0000
21	.0000	-.1260	.0000	.0000	.0000	.0000
24	.0000	-.1260	.0000	.0000	.0000	.0000
33	.0000	-.0250	.0000	.0000	.0000	.0000
35	.0000	-.0250	.0000	.0000	.0000	.0000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

LCDdefinition Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

LIVE LOAD

Joint	=	4
Member	=	18
Elem Temp	=	0
Node Temp	=	0
Plate	=	0
Body force multiplier	=	.000
Direction	=	
Non-Linear multiplier	=	.000

F:\MONROE\MORO

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

NLOAD

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

LIVE LOAD

Node#	X-Force	Y-Force	Z-Force	X-Moment	Y- Moment	Z-Moment
7	.0000	.0000	.1210	.0000	.4400	.0000
51	.0000	.0000	.0610	.0000	.1000	.0000
52	.0000	.0000	.8150	.0000	-1.5180	.0000
53	.0000	.0000	1.2410	.0000	.1090	.0000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

ELoad

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L & W ENGINEERING

LIVE LOAD

Memb#	L#	Type	Magnitude	Plane	I_dist	J_dist	Fract?
1	1	UNIFO	.04270	XZ	.0000	.0000	
2	1	UNIFO	.04270	XZ	.0000	.0000	
3	1	UNIFO	.04270	XZ	.0000	.0000	
4	1	UNIFO	.04270	XZ	.0000	.0000	
5	1	UNIFO	.04270	XZ	.0000	.0000	
6	1	UNIFO	.04270	XZ	.0000	.0000	
7	1	UNIFO	.04270	XZ	.0000	.0000	
8	1	UNIFO	.02775	XZ	.0000	.0000	
9	1	UNIFO	.02775	XZ	.0000	.0000	
10	1	UNIFO	.02775	XZ	.0000	.0000	
11	1	UNIFO	.02775	XZ	.0000	.0000	
12	1	UNIFO	.02775	XZ	.0000	.0000	
13	1	UNIFO	.02775	XZ	.0000	.0000	
14	1	UNIFO	.02775	XZ	.0000	.0000	
15	1	UNIFO	.02775	XZ	.0000	.0000	
96	1	UNIFO	.04270	XZ	.0000	.0000	
97	1	UNIFO	.04270	XZ	.0000	.0000	
98	1	UNIFO	.04270	XZ	.0000	.0000	

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

LCDefinition Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

WIND LOAD Z-DIRECTION

Joint	=	6
Member	=	12
Elem Temp	=	0
Node Temp	=	0
Plate	=	0
Body force multiplier	=	.000
Direction	=	
Non-Linear multiplier	=	.000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

NL0ad

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

WIND LOAD Z-DIRECTION

Node#	X-Force	Y-Force	Z-Force	X-Moment	Y- Moment	Z-Moment
14	.0000	.0000	1.9000	.0000	4.6800	.0000
18	.0000	.0000	.2040	.9350	.0000	.0000
21	.0000	.0000	.2040	.9350	.0000	.0000
24	.0000	.0000	.2040	.9350	.0000	.0000
33	.0000	.0000	.4080	.9350	.0000	.0000
35	.0000	.0000	.4080	.0000	.0000	.0000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

ELOAD

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

WIND LOAD Z-DIRECTION

Memb#	L#	Type	Magnitude	Plane	I_dist	J_dist	Fract?
57	1	UNIFO	.00269	XZ	.0000	.0000	
58	1	UNIFO	.00269	XZ	.0000	.0000	
59	1	UNIFO	.00269	XZ	.0000	.0000	
60	1	UNIFO	.00269	XZ	.0000	.0000	
61	1	UNIFO	.00269	XZ	.0000	.0000	
62	1	UNIFO	.00269	XZ	.0000	.0000	
63	1	UNIFO	.00281	XZ	.0000	.0000	
64	1	UNIFO	.00281	XZ	.0000	.0000	
65	1	UNIFO	.00281	XZ	.0000	.0000	
66	1	UNIFO	.00281	XZ	.0000	.0000	
67	1	UNIFO	.00281	XZ	.0000	.0000	
68	1	UNIFO	.00281	XZ	.0000	.0000	

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

LCDefinition Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

ICE LOAD

Joint	=	30
Member	=	71
Elem Temp	=	0
Node Temp	=	0
Plate	=	0
Body force multiplier	=	-1.000
Direction	=	Y
Non-Linear multiplier	=	.000

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HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

NL0ad

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L & W ENGINEERING

ICE LOAD

Node#	X-Force	Y-Force	Z-Force	X-Moment	Y- Moment	Z-Moment
2	.0000	-.0300	.0000	.0000	.0000	.0000
3	.0000	-.0930	.0000	.0000	.0000	.0000
4	.0000	-.1240	.0000	.0000	.0000	.0000
5	.0000	-.1240	.0000	.0000	.0000	.0000
6	.0000	-.0740	.0000	.0000	.0000	.0000
7	.0000	-.1240	.0000	.0000	.0000	.0000
9	.0000	-.0680	.0000	.0000	.0000	.0000
10	.0000	-.0280	.0000	.0000	.0000	.0000
11	.0000	-.0280	.0000	.0000	.0000	.0000
12	.0000	-.0500	.0000	.0000	.0000	.0000
13	.0000	-.0120	.0000	.0000	.0000	.0000
14	.0000	-.0120	.0000	.0000	.0000	.0000
16	.0000	-.0370	.0000	.0000	.0000	.0000
18	.0000	-.0080	.0000	.0000	.0000	.0000
19	.0000	-.0180	.0000	.0000	.0000	.0000
20	.0000	-.0180	.0000	.0000	.0000	.0000
21	.0000	-.0180	.0000	.0000	.0000	.0000
22	.0000	-.0180	.0000	.0000	.0000	.0000
23	.0000	-.0180	.0000	.0000	.0000	.0000
24	.0000	-.0180	.0000	.0000	.0000	.0000
26	.0000	-.0300	.0000	.0000	.0000	.0000
27	.0000	-.0300	.0000	.0000	.0000	.0000
28	.0000	-.0300	.0000	.0000	.0000	.0000
29	.0000	-.0300	.0000	.0000	.0000	.0000
30	.0000	-.0300	.0000	.0000	.0000	.0000
31	.0000	-.0300	.0000	.0000	.0000	.0000
32	.0000	-.0180	.0000	.0000	.0000	.0000
33	.0000	-.0180	.0000	.0000	.0000	.0000
34	.0000	-.0180	.0000	.0000	.0000	.0000
35	.0000	-.0180	.0000	.0000	.0000	.0000

F:\MONROE\MORO

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER
MONORE, CONN.

ELoad

Prepared on 02-09-199 at 22:29

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L & W ENGINEERING

ICE LOAD

Memb#	L#	Type	Magnitude	Plane	I_dist	J_dist	Fract?
1	1	UNIFO	.03619	XZ	.0000	.0000	
2	1	UNIFO	.03619	XZ	.0000	.0000	
3	1	UNIFO	.03619	XZ	.0000	.0000	
4	1	UNIFO	.03619	XZ	.0000	.0000	
5	1	UNIFO	.04736	XZ	.0000	.0000	
6	1	UNIFO	.04736	XZ	.0000	.0000	
7	1	UNIFO	.04481	XZ	.0000	.0000	
8	1	UNIFO	.04481	XZ	.0000	.0000	
9	1	UNIFO	.04481	XZ	.0000	.0000	
10	1	UNIFO	.04481	XZ	.0000	.0000	
11	1	UNIFO	.04481	XZ	.0000	.0000	
12	1	UNIFO	.04481	XZ	.0000	.0000	
13	1	UNIFO	.04481	XZ	.0000	.0000	
14	1	UNIFO	.04481	XZ	.0000	.0000	
15	1	UNIFO	.04481	XZ	.0000	.0000	
16	1	UNIFO	.00806	XZ	.0000	.0000	
17	1	UNIFO	.00806	XZ	.0000	.0000	
18	1	UNIFO	.00806	XZ	.0000	.0000	
19	1	UNIFO	.00806	XZ	.0000	.0000	
20	1	UNIFO	.00806	XZ	.0000	.0000	
21	1	UNIFO	.00806	XZ	.0000	.0000	
22	1	UNIFO	.00806	XZ	.0000	.0000	
23	1	UNIFO	.00806	XZ	.0000	.0000	
24	1	UNIFO	.00806	XZ	.0000	.0000	
25	1	UNIFO	.00806	XZ	.0000	.0000	
26	1	UNIFO	.00806	XZ	.0000	.0000	
27	1	UNIFO	.00806	XZ	.0000	.0000	
28	1	UNIFO	.00806	XZ	.0000	.0000	
29	1	UNIFO	.00806	XZ	.0000	.0000	
30	1	UNIFO	.00806	XZ	.0000	.0000	
31	1	UNIFO	.00806	XZ	.0000	.0000	
32	1	UNIFO	.00806	XZ	.0000	.0000	
33	1	UNIFO	.00806	XZ	.0000	.0000	
34	1	UNIFO	.00806	XZ	.0000	.0000	
35	1	UNIFO	.00806	XZ	.0000	.0000	
36	1	UNIFO	.00806	XZ	.0000	.0000	
37	1	UNIFO	.00692	XZ	.0000	.0000	
38	1	UNIFO	.00692	XZ	.0000	.0000	
39	1	UNIFO	.00806	XZ	.0000	.0000	
40	1	UNIFO	.00806	XZ	.0000	.0000	

Memb#	L#	Type	Magnitude	Plane	I_distr	J_distr	FracT?
41	1	UNIF0	.00806	XZ	.0000	.0000	
42	1	UNIF0	.00692	XZ	.0000	.0000	
43	1	UNIF0	.00692	XZ	.0000	.0000	
44	1	UNIF0	.00806	XZ	.0000	.0000	
45	1	UNIF0	.00806	XZ	.0000	.0000	
46	1	UNIF0	.00806	XZ	.0000	.0000	
47	1	UNIF0	.00692	XZ	.0000	.0000	
48	1	UNIF0	.00692	XZ	.0000	.0000	
49	1	UNIF0	.00692	XZ	.0000	.0000	
50	1	UNIF0	.00692	XZ	.0000	.0000	
51	1	UNIF0	.00692	XZ	.0000	.0000	
52	1	UNIF0	.00692	XZ	.0000	.0000	
53	1	UNIF0	.00692	XZ	.0000	.0000	
54	1	UNIF0	.00806	XZ	.0000	.0000	
55	1	UNIF0	.00806	XZ	.0000	.0000	
56	1	UNIF0	.00692	XZ	.0000	.0000	
57	1	UNIF0	.00269	XZ	.0000	.0000	
58	1	UNIF0	.00269	XZ	.0000	.0000	
59	1	UNIF0	.00269	XZ	.0000	.0000	
60	1	UNIF0	.00269	XZ	.0000	.0000	
61	1	UNIF0	.00269	XZ	.0000	.0000	
62	1	UNIF0	.00269	XZ	.0000	.0000	
63	1	UNIF0	.00281	XZ	.0000	.0000	
64	1	UNIF0	.00281	XZ	.0000	.0000	
65	1	UNIF0	.00281	XZ	.0000	.0000	
66	1	UNIF0	.00281	XZ	.0000	.0000	
67	1	UNIF0	.00281	XZ	.0000	.0000	
68	1	UNIF0	.00281	XZ	.0000	.0000	
69	1	UNIF0	.03620	XZ	.0000	.0000	
70	1	UNIF0	.04736	XZ	.0000	.0000	
71	1	UNIF0	.04480	XZ	.0000	.0000	
72	1	UNIF0					98

ICE LOAD

L & W ENGINEERING

HOUSTATONIC CABLEVISION
140 FT. GUYED TOWER
MONROE, CONN.

F:\MONROE\MORO

ARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-02-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Nodal Displacements

Node	LC	TX	TY	TZ	RX	RY	RZ
2	5	-.5229E-04	-.2150E-03	-.3973E-01	-.8171E-02	-.3284E-03	.1078E-04
3	5	-.2014E-03	-.1587E-02	-.1490	-.5855E-02	-.1360E-02	.8389E-05
4	5	-.3015E-03	-.3294E-02	-.2163	-.7178E-03	-.2720E-02	.7730E-06
5	5	-.1985E-03	-.4880E-02	-.1832	.3593E-02	-.4364E-02	-.1192E-04
6	5	-.1867E-04	-.5434E-02	-.1359	.4142E-02	.1903E-03	-.1824E-04
7	5	.1466E-03	-.5739E-02	-.1038	.3783E-02	.2659E-03	-.2340E-04
8	5	.8151E-03	-.6796E-02	-.4664E-01	.2367E-02	.3947E-02	-.4118E-04
9	5	.1294E-02	-.7338E-02	-.1995E-01	.2545E-02	.5630E-02	-.4519E-04
10	5	.1499E-02	-.7544E-02	-.8254E-02	.2646E-02	.5217E-02	-.4612E-04
11	5	.1709E-02	-.7711E-02	.3817E-02	.2718E-02	.3776E-02	-.4736E-04
12	5	.2107E-02	-.7832E-02	.2618E-01	.2890E-02	.3808E-02	-.5242E-04
13	5	.2213E-02	-.7856E-02	.3201E-01	.2931E-02	.9755E-02	-.5333E-04
14	5	.2320E-02	-.7879E-02	.3789E-01	.2943E-02	.1475E-01	-.5324E-04
15	5	.2426E-02	-.7886E-02	.4377E-01	.2938E-02	.1442E-01	-.5366E-04
16	5	.2748E-02	-.7893E-02	.6136E-01	.2929E-02	.1442E-01	-.5366E-04

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-02-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
1	1	5	8.73	- .230E-02	2.78	.119	.000	.000
1	2	5	-8.73	.230E-02	-2.40	-.119	-12.5	-.111E-01
2	2	5	8.42	- .230E-02	2.40	.119	12.5	.111E-01
2	3	5	-8.42	.230E-02	-1.20	-.119	-39.8	-.460E-01
3	3	5	7.94	- .230E-02	1.20	.119	39.8	.460E-01
3	4	5	-7.94	.230E-02	.376	-.119	-48.1	-.920E-01
4	4	5	7.44	- .230E-02	-.376	.119	48.1	.920E-01
4	51	5	-7.44	.230E-02	1.56	-.119	-33.5	-.127
5	52	5	6.74	- .230E-02	-1.53	-1.30	14.5	.150
5	6	5	-6.74	.230E-02	2.16	1.30	-1.56	-.166
6	6	5	5.64	- .869E-02	-2.39	-.166E-01	-2.45	.152
6	7	5	-5.64	.869E-02	3.11	.166E-01	24.4	-.221
7	53	5	4.81	.614E-02	1.81	-.269	-14.5	.161
7	8	5	-4.81	-.614E-02	-.936	.269	.745	-.997E-01
8	8	5	4.58	.614E-02	.936	-.269	-.745	.997E-01
8	9	5	-4.58	-.614E-02	-.137	.269	-5.16	-.322E-01
9	9	5	4.26	- .222E-02	-.296	.161	4.96	.326E-01
9	10	5	-4.26	.222E-02	.623	-.161	-2.90	-.427E-01
10	10	5	3.46	- .271E-02	.123	.562	2.89	.437E-01
10	11	5	-3.46	.271E-02	.203	-.562	-2.71	-.559E-01
11	11	5	2.24	- .929E-02	.766	-.706E-02	3.91	.145
11	12	5	-2.24	.929E-02	-.185	.706E-02	7.71	-.220
12	12	5	1.78	.899E-01	-1.80	-5.22	7.78	.222
12	13	5	-1.78	-.899E-01	1.95	5.22	-4.03	-.423E-01
13	13	5	1.66	- .379E-01	-2.03	-4.39	3.81	-.519E-01
13	14	5	-1.66	.379E-01	2.17	4.39	-.392	-.238E-01
14	14	5	.580	- .379E-01	-.272	.294	-.392	.238E-01
14	15	5	-.580	.379E-01	.417	-.294	1.08	-.996E-01
15	15	5	.166	.111E-12	.435	-.205E-14	-1.31	.273E-12
15	16	5	-.166	-.111E-12	.364E-12	.205E-14	.562E-12	.393E-12
16	46	5	.396	.354E-03	.423E-01	.388E-02	-.710E-01	-.104E-03
16	26	5	-.396	-.354E-03	.370E-01	-.388E-02	.451E-01	.358E-02
17	40	5	3.42	-.229E-02	.289E-01	-.586E-02	-.294E-01	-.149E-01
17	26	5	-3.42	.229E-02	.172E-01	.586E-02	-.397E-02	.181E-02
18	45	5	-.903	.297E-02	.430E-01	-.488E-02	-.787E-01	.124E-01
18	27	5	.903	-.297E-02	.362E-01	.488E-02	.455E-01	.167E-01
19	39	5	-2.88	-.556E-02	.375E-01	-.828E-03	-.712E-01	-.217E-01
19	27	5	2.88	.556E-02	.859E-02	.828E-03	-.113E-01	-.100E-01
20	47	5	.296	-.103E-02	.439E-01	-.185E-03	-.817E-01	-.521E-02
20	28	5	-.296	.103E-02	.353E-01	.185E-03	.394E-01	-.493E-02

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
21	41	5	-.320	.740E-02	.167E-01	-.628E-02	.907E-02	.289E-01
21	28	5	.320	-.740E-02	.294E-01	.628E-02	.271E-01	.134E-01
22	49	5	.481	.319E-03	.431E-01	-.150E-02	-.764E-01	.560E-03
22	29	5	-.481	-.319E-03	.361E-01	.150E-02	.418E-01	.257E-02
23	43	5	-.350	.200E-02	.264E-01	-.437E-02	-.265E-01	.661E-02
23	29	5	.350	-.200E-02	.196E-01	.437E-02	.704E-02	.481E-02
24	48	5	.519	-.483E-03	.431E-01	.118E-02	-.765E-01	-.289E-02
24	30	5	-.519	.483E-03	.361E-01	-.118E-02	.420E-01	-.186E-02
25	42	5	.824	.354E-02	.245E-01	-.621E-02	-.182E-01	.106E-01
25	30	5	-.824	-.354E-02	.215E-01	.621E-02	.978E-02	.965E-02
26	50	5	-.284	.126E-02	.421E-01	.365E-03	-.709E-01	.427E-02
26	31	5	.284	-.126E-02	.371E-01	-.365E-03	.463E-01	.811E-02
27	44	5	1.02	-.317E-02	.313E-01	-.389E-02	-.433E-01	-.159E-01
27	31	5	-.1.02	.317E-02	.147E-01	.389E-02	-.422E-02	-.223E-02
28	17	5	.209	-.300E-01	.614E-01	.115	.374E-01	-.831E-01
28	18	5	-.209	.300E-01	-.252E-01	-.115	-.232	-.518E-01
29	18	5	.465E-01	.129E-01	.134	.718E-01	-.521	.103
29	19	5	-.465E-01	-.129E-01	-.976E-01	-.718E-01	.848E-04	-.448E-01
30	20	5	.202	.293E-01	.629E-01	-.101	.250E-01	.763E-01
30	21	5	-.202	-.293E-01	-.266E-01	.101	-.226	.554E-01
31	21	5	.463E-01	-.178E-01	.143	-.650E-01	-.543	-.115
31	22	5	-.463E-01	.178E-01	-.107	.650E-01	-.174E-01	.351E-01
32	23	5	-.832E-03	.923E-03	.106	.634E-02	-.812E-01	.694E-02
32	24	5	.832E-03	-.923E-03	-.699E-01	-.634E-02	-.315	-.279E-02
33	24	5	.545E-01	.465E-02	.110	.251E-02	-.345	.116E-01
33	25	5	-.545E-01	-.465E-02	-.734E-01	-.251E-02	-.669E-01	.929E-02
34	9	5	.381	.150E-01	.866E-01	-.739E-01	-.260	.365E-01
34	17	5	-.381	-.150E-01	-.382E-01	.739E-01	-.115	.533E-01
35	10	5	.856E-02	-.330E-01	-.127E-01	-.132	.178	-.630E-01
35	18	5	-.856E-02	.330E-01	.611E-01	.132	.430E-01	-.135
36	11	5	-.377E-01	.971E-02	-.426E-01	-.225E-01	.329	.196E-01
36	19	5	.377E-01	-.971E-02	.910E-01	.225E-01	.718E-01	.387E-01
37	10	5	-.405	.000	.000	.000	.000	.000
37	17	5	.405	.000	.000	.000	.000	.000
38	11	5	-.117	.000	.000	.000	.000	.000
38	18	5	.117	.000	.000	.000	.000	.000
39	9	5	.396	.151E-01	.852E-02	.598E-01	-.699E-02	.369E-01
39	20	5	-.396	-.151E-01	.398E-01	-.598E-01	.101	.536E-01
40	10	5	.303E-01	-.328E-01	.101	.113	-.424	-.624E-01
40	21	5	-.303E-01	.328E-01	-.525E-01	-.113	-.359E-01	-.134

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
41	11	5	-.378E-01	.990E-02	.149	.247E-02	-.687	.202E-01
41	22	5	.378E-01	-.990E-02	-.101	-.247E-02	-.650E-01	.392E-01
42	10	5	-.424	.000	.000	.000	.000	.000
42	20	5	.424	.000	.000	.000	.000	.000
43	11	5	-.144	.000	.000	.000	.000	.000
43	21	5	.144	.000	.000	.000	.000	.000
44	9	5	.221E-01	-.184E-01	.523E-01	-.694E-02	-.163	-.403E-01
44	23	5	-.221E-01	.184E-01	.923E-03	.694E-02	-.634E-02	-.812E-01
45	10	5	.464	.632E-01	.495E-01	-.884E-02	-.155	.142
45	24	5	-.464	-.632E-01	.373E-02	.884E-02	.383E-02	.275
46	11	5	.734E-01	-.141E-01	.578E-01	-.929E-02	-.209	-.260E-01
46	25	5	-.734E-01	.141E-01	-.465E-02	.929E-02	.251E-02	-.669E-01
47	10	5	-.155	.000	.000	.000	.000	.000
47	23	5	.155	.000	.000	.000	.000	.000
48	11	5	-.363	.000	.000	.000	.000	.000
48	24	5	.363	.000	.000	.000	.000	.000
49	32	5	.578E-01	-.701E-02	.216E-02	.405E-01	.220E-01	-.163E-01
49	33	5	-.578E-01	.701E-02	.255E-01	-.405E-01	.247E-01	-.118E-01
50	34	5	.706E-01	.576E-01	-.842E-01	-.411E-02	.191	.117
50	35	5	-.706E-01	-.576E-01	.112	.411E-02	.202	.114
51	13	5	.157	.908E-03	.399E-01	-.272E-01	-.743E-01	.233E-02
51	32	5	-.157	-.908E-03	.163E-02	.272E-01	-.405E-01	.312E-02
52	15	5	-.197	-.430E-03	-.286	-.273E-01	1.80	-.400E-03
52	33	5	.197	.430E-03	.328	.273E-01	.405E-01	-.218E-02
53	15	5	-.180	.000	.000	.000	.000	.000
53	32	5	.180	.000	.000	.000	.000	.000
54	13	5	.194	.209E-02	.150	.223	-.759	.681E-02
54	34	5	-.194	-.209E-02	-.102	-.223	.411E-02	.573E-02
55	15	5	-.198	.848E-05	.276	.231	-1.51	.245E-02
55	35	5	.198	-.848E-05	-.228	-.231	-.411E-02	-.239E-02
56	15	5	-.224	.000	.000	.000	.000	.000
56	34	5	.224	.000	.000	.000	.000	.000
57	26	5	-.1.20	.000	.000	.000	.000	.000
57	36	5	1.20	.000	.000	.000	.000	.000
58	28	5	-.386	.000	.000	.000	.000	.000
58	36	5	.386	.000	.000	.000	.000	.000
59	28	5	-.447	.000	.000	.000	.000	.000
59	37	5	.447	.000	.000	.000	.000	.000
60	27	5	-.1.15	.000	.000	.000	.000	.000
60	37	5	1.15	.000	.000	.000	.000	.000

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
61	26	5	1.87	.000	.000	.000	.000	.000
61	38	5	-1.87	.000	.000	.000	.000	.000
62	27	5	1.81	.000	.000	.000	.000	.000
62	38	5	-1.81	.000	.000	.000	.000	.000
63	29	5	-.111	.000	.000	.000	.000	.000
63	36	5	.111	.000	.000	.000	.000	.000
64	31	5	1.10	.000	.000	.000	.000	.000
64	36	5	-1.10	.000	.000	.000	.000	.000
65	31	5	.335	.000	.000	.000	.000	.000
65	37	5	-.335	.000	.000	.000	.000	.000
66	30	5	.526	.000	.000	.000	.000	.000
66	37	5	-.526	.000	.000	.000	.000	.000
67	29	5	-.873E-01	.000	.000	.000	.000	.000
67	38	5	.873E-01	.000	.000	.000	.000	.000
68	30	5	-.800	.000	.000	.000	.000	.000
68	38	5	.800	.000	.000	.000	.000	.000
69	7	5	-1.25	.471E-01	-.143	.718E-02	.243	.747E-01
69	39	5	1.25	-.471E-01	.143	-.718E-02	.390E-01	.184E-01
70	7	5	.652	.634E-01	-3.81	-.360E-01	7.44	.129
70	40	5	-.652	-.634E-01	3.81	.360E-01	.775E-01	-.443E-02
71	7	5	.657	.636E-01	3.49	.488E-01	-6.88	.130
71	41	5	-.657	-.636E-01	-3.49	-.488E-01	.878E-03	-.466E-02
72	12	5	.192	.648E-01	-.819	.818E-02	1.58	.133
72	42	5	-.192	-.648E-01	.819	-.818E-02	.357E-01	-.516E-02
73	12	5	-.528E-01	.567E-01	.341	.292E-01	-.691	.106
73	43	5	.528E-01	-.567E-01	-.341	-.292E-01	.194E-01	.540E-02
74	12	5	-.288E-01	.570E-01	-2.22	-.156E-01	4.32	.107
74	44	5	.288E-01	-.570E-01	2.22	.156E-01	.551E-01	.498E-02
75	39	5	-3.03	-.105E-01	-.518E-02	-.786E-02	.322E-01	-.310E-01
75	26	5	3.03	.105E-01	.518E-02	.786E-02	-.263E-02	-.287E-01
76	41	5	3.25	-.691E-02	.352E-02	-.276E-02	-.995E-02	-.231E-01
76	27	5	-3.25	.691E-02	-.352E-02	.276E-02	-.102E-01	-.164E-01
77	40	5	-.503	.260E-02	.156E-01	-.244E-02	-.481E-01	.201E-01
77	28	5	.503	-.260E-02	-.156E-01	.244E-02	-.412E-01	-.521E-02
78	42	5	-.220E-01	-.189E-02	.700E-02	-.329E-02	-.175E-01	.444E-04
78	29	5	.220E-01	.189E-02	-.700E-02	.329E-02	-.225E-01	-.108E-01
79	44	5	-1.26	-.295E-02	.581E-02	-.502E-02	-.118E-01	-.193E-02
79	30	5	1.26	.295E-02	-.581E-02	.502E-02	-.214E-01	-.149E-01
80	43	5	-.707E-02	-.844E-02	.335E-03	-.568E-02	.718E-02	-.256E-01
80	31	5	.707E-02	.844E-02	-.335E-03	.568E-02	-.909E-02	-.226E-01

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
81	6	5	-.152	-1.12	.186	.206E-01	-.418	-2.27
81	45	5	.152	1.12	-.186	-.206E-01	.517E-01	.460E-01
82	6	5	.168	.919	.140	.245E-01	-.317	1.76
82	46	5	-.168	-.919	-.140	-.245E-01	.421E-01	.565E-01
83	6	5	.167	.911	.246	.174E-01	-.547	1.74
83	47	5	-.167	-.911	-.246	-.174E-01	.612E-01	.567E-01
84	11	5	.117	.588	-.232	.181E-01	.409	1.10
84	48	5	-.117	-.588	.232	-.181E-01	.484E-01	.589E-01
85	11	5	.110E-01	-.873E-01	-.661	.151E-01	1.25	-.222
85	49	5	-.110E-01	.873E-01	.661	-.151E-01	.527E-01	.500E-01
86	11	5	.188E-01	-.354E-01	.244	.212E-01	-.524	-.120
86	50	5	-.188E-01	.354E-01	-.244	-.212E-01	.434E-01	.504E-01
87	45	5	-.596	.128E-02	.323E-02	.394E-02	-.903E-02	.716E-02
87	26	5	.596	-.128E-02	-.323E-02	-.394E-02	-.227E-01	.539E-02
88	47	5	.711	-.143E-02	.394E-02	-.481E-02	-.166E-01	-.583E-02
88	27	5	-.711	.143E-02	-.394E-02	.481E-02	-.222E-01	.818E-02
89	46	5	.620	-.275E-02	.230E-02	-.676E-03	-.602E-02	-.107E-01
89	28	5	-.620	.275E-02	-.230E-02	.676E-03	-.165E-01	-.164E-01
90	48	5	.912E-01	-.183E-02	.260E-02	-.123E-02	-.666E-02	-.633E-02
90	29	5	-.912E-01	.183E-02	-.260E-02	.123E-02	-.189E-01	-.116E-01
91	50	5	.126	-.113E-02	.251E-02	.148E-02	-.633E-02	-.325E-02
91	30	5	-.126	.113E-02	-.251E-02	-.148E-02	-.183E-01	-.782E-02
92	49	5	-.703	-.589E-04	.357E-02	-.156E-03	-.120E-01	.102E-02
92	31	5	.703	.589E-04	-.357E-02	.156E-03	-.231E-01	-.160E-02
93	25	5	.000	.000	.000	.000	.000	.000
93	25	5	.000	.000	.000	.000	.000	.000
94	25	5	.000	.000	.000	.000	.000	.000
94	25	5	.000	.000	.000	.000	.000	.000
95	25	5	.000	.000	.000	.000	.000	.000
95	25	5	.000	.000	.000	.000	.000	.000
96	51	5	7.22	-.230E-02	-1.50	.219	33.5	.127
96	5	5	-.7.22	.230E-02	1.89	-.219	-.25.1	-.138
97	5	5	6.95	-.230E-02	-1.89	.219	25.1	.138
97	52	5	-.6.95	.230E-02	2.34	-.219	-.14.5	-.150
98	7	5	5.03	.614E-02	1.44	-.378	-.24.5	.223
98	53	5	-.5.03	-.614E-02	-.570	.378	14.5	-.161

ARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-02-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Linear/Static

REPORT FOR Reaction Forces

Node	LC	FX	FY	FZ	MX	MY	MZ
1	5	.2301E-02	8.838	2.779	.0000	.1193	.0000
36	5	.5046	.6249E-01	.3822	.0000	.0000	.0000
37	5	-.6095	-.4627E-01	.3812	.0000	.0000	.0000
38	5	.2714E-01	1.841	2.340	.0000	.0000	.0000

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Nodal Displacements

Node	LC	TX	TY	TZ	RX	RY	RZ
2	0	.9812E-06	-.5303E-03	.5960E-06	.1201E-06	.2557E-10	-.2038E-06
2	1	.2669E-04	-.5595E-03	-.1696E-01	-.3484E-02	-.3620E-03	-.4260E-05
2	2	.3088E-04	-.5686E-03	-.1950E-01	-.4009E-02	-.3596E-03	-.4950E-05
2	3	-.1089E-04	-.8044E-03	-.4091E-01	-.8415E-02	-.3274E-03	.4955E-05
3	0	.4259E-05	-.4015E-02	.1389E-05	-.4995E-07	.1059E-09	-.2348E-06
3	1	.1096E-03	-.4110E-02	-.6276E-01	-.2364E-02	-.1499E-02	-.1107E-05
3	2	.1278E-03	-.4140E-02	-.7253E-01	-.2768E-02	-.1489E-02	-.1469E-05
3	3	-.2641E-04	-.5350E-02	-.1538	-.6055E-02	-.1356E-02	.8854E-05
4	0	.9822E-05	-.8569E-02	-.4370E-05	-.5833E-06	.2119E-09	-.3320E-06
4	1	.1758E-03	-.8673E-02	-.8677E-01	.5002E-05	-.2998E-02	-.2345E-06
4	2	.2133E-03	-.8705E-02	-.1012	-.2049E-04	-.2979E-02	.8530E-06
4	3	-.2840E-05	-.1081E-01	-.2239	-.7921E-03	-.2714E-02	.1760E-05
5	0	.1794E-04	-.1308E-01	-.2413E-04	-.1445E-05	.3180E-09	-.4893E-06
5	1	.1316E-03	-.1319E-01	-.6675E-01	.1726E-02	-.4784E-02	-.3910E-05
5	2	.1739E-03	-.1322E-01	-.7599E-01	.2312E-02	-.4756E-02	.6048E-05
5	3	.4130E-04	-.1607E-01	-.1899	.3766E-02	-.4364E-02	-.2108E-04
6	0	.2425E-04	-.1476E-01	-.4388E-04	-.1859E-05	.3816E-09	.5649E-06
6	1	.8196E-04	-.1489E-01	-.4541E-01	.1754E-02	-.3150E-03	.3069E-05
6	2	.1113E-03	-.1494E-01	-.4591E-01	.2633E-02	-.2820E-03	.4030E-05
6	3	.1321E-03	-.1810E-01	-.1401	.4368E-02	-.1830E-03	-.1121E-04
7	0	.2922E-04	-.1550E-01	-.5958E-04	-.2104E-05	.3597E-09	-.6895E-06
7	1	.5684E-04	-.1563E-01	-.3223E-01	.1499E-02	-.2380E-03	.2292E-05
7	2	.7851E-04	-.1570E-01	-.2480E-01	.2616E-02	-.2031E-03	.2879E-05
7	3	.2568E-03	-.1903E-01	-.1062	.4000E-02	-.2642E-03	-.1852E-04
8	0	.3962E-04	-.1835E-01	-.9508E-04	-.4119E-06	.4020E-09	.1398E-06
8	1	.2669E-04	-.1849E-01	-.1683E-01	.1867E-03	.1892E-03	.1221E-05
8	2	.4461E-04	-.1861E-01	.2165E-01	.2051E-02	.1376E-02	.3920E-05
8	3	.9174E-03	-.2239E-01	-.4596E-01	.2459E-02	.3951E-02	-.3297E-04
9	0	.2952E-04	-.1990E-01	-.8172E-04	.3150E-05	.4262E-09	.1843E-05
9	1	.9799E-05	-.2004E-01	-.1619E-01	-.2080E-04	.8260E-04	.2072E-05
9	2	.2820E-04	-.2017E-01	.4349E-01	.1931E-02	.1903E-02	.5857E-05
9	3	.1424E-02	-.2418E-01	-.1863E-01	.2571E-02	.5637E-02	-.3433E-04
10	0	.1936E-04	-.2053E-01	-.6398E-04	.4646E-05	-.1125E-08	.2655E-05
10	1	-.8828E-06	-.2067E-01	-.1632E-01	-.3184E-04	.4583E-04	.2671E-05
10	2	.1641E-04	-.2081E-01	.5208E-01	.1887E-02	.2084E-02	.7035E-05
10	3	.1648E-02	-.2490E-01	-.6840E-02	.2664E-02	.5224E-02	-.3685E-04
11	0	.5414E-05	-.2112E-01	-.3672E-04	.8282E-05	-.5954E-09	.3611E-05
11	1	-.1456E-04	-.2126E-01	-.1645E-01	-.2202E-04	.9104E-05	.3475E-05
11	2	-.1571E-06	-.2141E-01	.6045E-01	.1827E-02	.2266E-02	.8470E-05
11	3	.1881E-02	-.2557E-01	.5292E-02	.2728E-02	.3781E-02	-.4223E-04

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Nodal Displacements

Node	LC	TX	TY	TZ	RX	RY	RZ
12	0	-.2910E-04	-.2120E-01	.5760E-04	.1566E-04	-.6111E-09	.5140E-05
12	1	-.4763E-04	-.2134E-01	-.1669E-01	-.4494E-04	.8218E-05	.4937E-05
12	2	-.4218E-04	-.2151E-01	.7551E-01	.1985E-02	.2360E-02	.1066E-04
12	3	.2315E-02	-.2573E-01	.2768E-01	.2888E-02	.3821E-02	-.4608E-04
13	0	-.3986E-04	-.2122E-01	.9105E-04	.1779E-04	-.1179E-08	.5616E-05
13	1	-.5798E-04	-.2136E-01	-.1679E-01	-.5455E-04	.8212E-05	.5414E-05
13	2	-.5440E-04	-.2153E-01	.7954E-01	.2043E-02	.7804E-02	.2209E-04
13	3	.2431E-02	-.2576E-01	.3350E-01	.2930E-02	.9887E-02	-.2945E-04
14	0	-.5148E-04	-.2124E-01	.1284E-03	.1938E-04	-.5767E-08	.5968E-05
14	1	-.6920E-04	-.2138E-01	-.1690E-01	-.6084E-04	.8218E-05	.5767E-05
14	2	-.6729E-04	-.2155E-01	.8366E-01	.2067E-02	.1252E-01	.3251E-04
14	3	.2548E-02	-.2579E-01	.3938E-01	.2942E-02	.1497E-01	-.1431E-04
15	0	-.6358E-04	-.2124E-01	.1678E-03	.1991E-04	-.1036E-07	.6092E-05
15	1	-.8090E-04	-.2138E-01	-.1703E-01	-.6511E-04	.8225E-05	.5891E-05
15	2	-.8016E-04	-.2156E-01	.8779E-01	.2069E-02	.1191E-01	.3080E-04
15	3	.2665E-02	-.2580E-01	.4526E-01	.2937E-02	.1473E-01	-.1567E-04
16	0	-.1001E-03	-.2125E-01	.2873E-03	.1991E-04	-.1036E-07	.6092E-05
16	1	-.1163E-03	-.2139E-01	-.1744E-01	-.7031E-04	.8225E-05	.5891E-05
16	2	-.1171E-03	-.2158E-01	.1002	.2063E-02	.1191E-01	.3080E-04
16	3	.3017E-02	-.2584E-01	.6282E-01	.2923E-02	.1473E-01	-.1567E-04

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
1	1	0	21.5	-.299E-04	-.164E-03	-.929E-08	.000	.000
1	1	1	21.5	-.272E-03	1.34	.132	.000	.000
1	1	2	21.5	-.452E-03	1.46	.131	.000	.000
1	1	3	25.6	-.363E-02	2.77	.119	.000	.000
1	2	0	-21.5	.299E-04	.164E-03	.929E-08	.793E-03	-.144E-03
1	2	1	-21.5	.272E-03	-1.34	-.132	-6.49	-.131E-02
1	2	2	-21.5	.452E-03	-1.46	-.131	-7.05	-.218E-02
1	2	3	-25.6	.363E-02	-2.77	-.119	-13.4	-.175E-01
2	2	0	21.4	-.297E-04	-.163E-03	-.929E-08	-.793E-03	.144E-03
2	2	1	21.4	-.274E-03	.906	.132	6.49	.125E-02
2	2	2	21.3	-.454E-03	1.02	.131	7.05	.213E-02
2	2	3	25.3	-.360E-02	1.95	.119	13.4	.174E-01
2	3	0	-21.4	.297E-04	.163E-03	.929E-08	.326E-02	-.594E-03
2	3	1	-21.4	.274E-03	-.906	-.132	-20.2	-.541E-02
2	3	2	-21.3	.454E-03	-1.02	-.131	-22.5	-.901E-02
2	3	3	-25.3	.360E-02	-1.95	-.119	-42.9	-.720E-01
3	3	0	21.2	-.284E-04	-.155E-03	-.929E-08	-.326E-02	.594E-03
3	3	1	21.2	-.321E-03	.116	.132	20.2	.517E-02
3	3	2	21.2	-.499E-03	.226	.131	22.5	.877E-02
3	3	3	24.9	-.355E-02	.459	.119	42.9	.716E-01
3	4	0	-21.2	.284E-04	.155E-03	.929E-08	.637E-02	-.116E-02
3	4	1	-21.2	.321E-03	-.116	-.132	-22.5	-.116E-01
3	4	2	-21.2	.499E-03	-.226	-.131	-27.1	-.187E-01
3	4	3	-24.9	.355E-02	-.459	-.119	-52.1	-.142
4	4	0	21.0	-.262E-04	-.143E-03	-.929E-08	-.637E-02	.116E-02
4	4	1	21.0	-.425E-03	-.674	.132	22.5	.113E-01
4	4	2	21.0	-.608E-03	-.572	.131	27.1	.185E-01
4	4	3	24.3	-.353E-02	-1.04	.120	52.1	.142
4	51	0	-21.0	.262E-04	.143E-03	.929E-08	.852E-02	-.155E-02
4	51	1	-21.0	.425E-03	.674	-.132	-12.4	-.177E-01
4	51	2	-21.0	.608E-03	.572	-.131	-18.5	-.276E-01
4	51	3	-24.3	.353E-02	1.04	-.120	-36.5	-.195
5	52	0	20.7	-.231E-04	-.126E-03	-.929E-08	-.984E-02	.180E-02
5	52	1	20.7	-.473E-03	-.714	-1.29	.801	.249E-01
5	52	2	20.7	-.635E-03	-.625	-1.29	7.78	.383E-01
5	52	3	23.6	-.336E-02	-1.99	-1.30	16.2	.235
5	6	0	-20.7	.231E-04	.126E-03	.929E-08	.107E-01	-.196E-02
5	6	1	-20.7	.473E-03	.714	1.29	4.20	-.282E-01
5	6	2	-20.7	.635E-03	.625	1.29	-3.40	-.428E-01
5	6	3	-23.6	.336E-02	1.99	1.30	-2.30	-.259

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
6	6	0	13.6	-.324E-03	-.103E-02	.479E-08	-.473E-02	.320E-02
6	6	1	13.6	-.249E-03	-.1.14	-.169E-01	-.4.64	.316E-01
6	6	2	13.6	-.436E-03	-.749	-.173E-01	2.37	.473E-01
6	6	3	16.0	-.122E-01	-.2.87	-.178E-01	-.1.80	.227
6	7	0	-13.6	.324E-03	.103E-02	-.479E-08	.130E-01	-.579E-02
6	7	1	-13.6	.249E-03	1.14	.169E-01	13.7	-.336E-01
6	7	2	-13.6	.436E-03	.749	.173E-01	3.62	-.508E-01
6	7	3	-16.0	.122E-01	2.87	.178E-01	24.8	-.325
7	53	0	13.2	.133E-02	.281E-02	-.366E-08	.154E-01	-.753E-02
7	53	1	13.2	.186E-02	.808	.170E-01	-.14.0	.146E-01
7	53	2	13.2	.253E-02	.465	-.841E-01	-.7.17	.246E-01
7	53	3	15.1	.915E-02	1.38	-.269	-.14.9	.234
7	8	0	-13.2	-.133E-02	-.281E-02	.366E-08	-.434E-01	.208E-01
7	8	1	-13.2	-.186E-02	-.808	-.170E-01	5.88	.395E-02
7	8	2	-13.2	-.253E-02	-.465	.841E-01	2.52	.720E-03
7	8	3	-15.1	-.915E-02	-1.38	.269	1.14	-.142
8	8	0	13.1	.132E-02	.277E-02	-.367E-08	.434E-01	-.208E-01
8	8	1	13.1	.185E-02	.447	.170E-01	-.5.88	-.395E-02
8	8	2	13.1	.255E-02	.101	-.841E-01	-.2.52	-.675E-03
8	8	3	14.9	.925E-02	.544	-.269	-.1.14	.142
8	9	0	-13.1	-.132E-02	-.277E-02	.367E-08	-.740E-01	.353E-01
8	9	1	-13.1	-.185E-02	-.447	-.170E-01	.962	.243E-01
8	9	2	-13.1	-.255E-02	-.101	.841E-01	1.41	.287E-01
8	9	3	-14.9	-.925E-02	-.544	.269	-.4.85	-.407E-01
9	9	0	13.0	-.110E-02	-.494E-02	.605E-06	.714E-01	-.352E-01
9	9	1	13.0	-.561E-04	.231	.143E-01	-.963	-.242E-01
9	9	2	13.0	.186E-02	-.904E-01	-.708E-01	-.1.59	-.293E-01
9	9	3	14.5	-.100E-01	-.416	.161	4.65	.353E-01
9	10	0	-13.0	.110E-02	.494E-02	-.605E-06	-.491E-01	.302E-01
9	10	1	-13.0	.561E-04	-.231	-.143E-01	-.740E-01	.239E-01
9	10	2	-13.0	-.186E-02	.904E-01	.708E-01	2.00	.377E-01
9	10	3	-14.5	.100E-01	.416	-.161	-.2.78	-.805E-01
10	10	0	12.2	.369E-02	.437E-01	-.204E-06	.482E-01	-.302E-01
10	10	1	12.2	.374E-02	.143	.143E-01	.727E-01	-.239E-01
10	10	2	12.2	.290E-02	-.181	-.707E-01	-.2.00	-.377E-01
10	10	3	13.5	.694E-02	-.714E-01	.563	2.77	.754E-01
10	11	0	-12.2	-.369E-02	-.437E-01	.204E-06	-.245	.468E-01
10	11	1	-12.2	-.374E-02	-.143	-.143E-01	-.718	.407E-01
10	11	2	-12.2	-.290E-02	.181	.707E-01	2.81	.507E-01
10	11	3	-13.5	-.694E-02	.714E-01	-.563	-.2.45	-.442E-01

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stat

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
11	11	0	1.61	.331E-02	.971E-02	.647E-08	.227	-.419E-01
11	11	1	1.61	.391E-02	-.213	.194E-03	.251E-01	-.371E-01
11	11	2	1.61	-.236E-02	1.27	-.207E-01	.632	-.820E-01
11	11	3	2.28	-.253E-01	.494	-.871E-02	3.79	.418E-01
11	12	0	-1.61	-.331E-02	-.971E-02	-.647E-08	-.305	.684E-01
11	12	1	-1.61	-.391E-02	.213	-.194E-03	1.68	.684E-01
11	12	2	-1.61	.236E-02	-1.27	.207E-01	-10.8	.631E-01
11	12	3	-2.28	.253E-01	-.494	.871E-02	-7.74	-.244
12	12	0	1.36	-.731E-05	-.227E-04	.501E-06	.307	-.688E-01
12	12	1	1.36	-.703E-05	.305	.587E-05	-1.69	-.688E-01
12	12	2	1.35	.141E-01	-2.42	-4.78	10.8	-.513E-01
12	12	3	1.76	.962E-01	-1.88	-5.32	7.81	.244
12	13	0	-1.36	.731E-05	.227E-04	-.501E-06	-.307	.688E-01
12	13	1	-1.36	.703E-05	-.305	-.587E-05	1.08	.688E-01
12	13	2	-1.35	-.141E-01	2.42	4.78	-6.01	.796E-01
12	13	3	-1.76	-.962E-01	1.88	5.32	-4.05	-.516E-01
13	13	0	1.31	-.165E-01	-.761E-01	.403E-05	.306	-.673E-01
13	13	1	1.31	-.165E-01	.174	-.570E-05	-1.08	-.674E-01
13	13	2	1.30	-.557E-01	-2.45	-4.14	5.80	-.156
13	13	3	1.64	-.669E-01	-2.10	-4.46	3.81	-.959E-01
13	14	0	-1.31	.165E-01	.761E-01	-.403E-05	-.153	.343E-01
13	14	1	-1.31	.165E-01	-.174	.570E-05	.735	.344E-01
13	14	2	-1.30	.557E-01	2.45	4.14	-.898	.450E-01
13	14	3	-1.64	.669E-01	2.10	4.46	.392	-.378E-01
14	14	0	.274	-.165E-01	-.761E-01	.403E-05	.153	-.343E-01
14	14	1	.274	-.165E-01	.118	-.569E-05	-.735	-.344E-01
14	14	2	.268	-.485E-01	-.606	.537	.912	.156E-01
14	14	3	.560	-.669E-01	-.346	.217	-.392	.247E-01
14	15	0	-.274	.165E-01	.761E-01	-.403E-05	-.126E-02	.137E-02
14	15	1	-.274	.165E-01	-.118	.569E-05	.498	.148E-02
14	15	2	-.268	.485E-01	.606	-.537	.300	-.112
14	15	3	-.560	.669E-01	.346	-.217	1.08	-.158
15	15	0	.771E-01	-.469E-06	-.153E-05	-.968E-20	.921E-05	-.282E-05
15	15	1	.771E-01	-.454E-06	.833E-01	-.407E-14	-.500	-.272E-05
15	15	2	.772E-01	.409E-02	.822E-01	.116E-08	-.496	.123E-01
15	15	3	.166	.545E-04	.217	.407E-10	-.1.30	.193E-03
15	16	0	-.771E-01	.469E-06	.153E-05	.968E-20	-.261E-14	-.758E-14
15	16	1	-.771E-01	.454E-06	-.833E-01	.407E-14	-.635E-11	-.111E-11
15	16	2	-.772E-01	-.409E-02	-.822E-01	-.116E-08	.263E-02	.123E-01
15	16	3	-.166	-.545E-04	-.217	-.407E-10	.437E-04	.134E-03

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stat

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
16	46	0	1.40	.135E-03	.143E-02	.898E-03	-.903E-02	.901E-03
16	46	1	1.22	.433E-03	.127E-02	.243E-02	-.866E-02	.283E-02
16	46	2	1.46	-.239E-04	.146E-02	.137E-02	-.900E-02	-.868E-04
16	46	3	1.75	-.629E-04	.812E-03	.509E-02	-.461E-02	-.733E-03
16	26	0	-1.40	-.135E-03	-.143E-02	-.898E-03	-.505E-02	.426E-03
16	26	1	-1.22	-.433E-03	-.127E-02	-.243E-02	-.381E-02	.142E-02
16	26	2	-1.46	.239E-04	-.146E-02	-.137E-02	-.538E-02	-.148E-03
16	26	3	-1.75	.629E-04	-.812E-03	-.509E-02	-.337E-02	.115E-03
17	40	0	-1.47	.837E-03	-.620E-03	-.243E-03	.177E-02	.401E-02
17	40	1	-.312	-.615E-03	-.321E-03	-.711E-03	.262E-02	-.331E-02
17	40	2	-.711	.647E-03	-.633E-03	-.277E-03	.320E-02	.286E-02
17	40	3	2.03	-.192E-02	.642E-03	-.146E-02	.251E-02	-.105E-01
17	26	0	1.47	-.837E-03	.620E-03	.243E-03	.178E-02	.778E-03
17	26	1	.312	.615E-03	.321E-03	.711E-03	-.788E-03	-.200E-03
17	26	2	.711	-.647E-03	.633E-03	.277E-03	.421E-03	.830E-03
17	26	3	-2.03	.192E-02	-.642E-03	-.146E-02	-.618E-02	-.517E-03
18	45	0	1.39	.135E-03	.144E-02	.895E-03	-.905E-02	.905E-03
18	45	1	1.11	.126E-02	.149E-02	-.107E-02	-.985E-02	.611E-02
18	45	2	.988	.511E-03	.168E-02	-.132E-03	-.115E-01	.282E-02
18	45	3	.403	.256E-02	.155E-02	-.375E-02	-.123E-01	.119E-01
18	27	0	-1.39	-.135E-03	-.144E-02	-.895E-03	-.506E-02	.425E-03
18	27	1	-1.11	-.126E-02	-.149E-02	.107E-02	.481E-02	.629E-02
18	27	2	-.988	-.511E-03	-.168E-02	.132E-03	-.500E-02	.221E-02
18	27	3	-.403	-.256E-02	-.155E-02	.375E-02	-.297E-02	.134E-01
19	39	0	-1.47	.839E-03	-.625E-03	-.240E-03	.178E-02	.402E-02
19	39	1	-2.44	-.232E-02	.261E-02	.176E-02	-.118E-01	-.703E-02
19	39	2	-2.15	.229E-03	.133E-02	.471E-03	-.657E-02	.217E-02
19	39	3	-4.42	-.536E-02	.955E-02	.372E-02	-.411E-01	-.181E-01
19	27	0	1.47	-.839E-03	.625E-03	.240E-03	.179E-02	.775E-03
19	27	1	2.44	.232E-02	-.261E-02	-.176E-02	-.306E-02	-.620E-02
19	27	2	2.15	-.229E-03	-.133E-02	-.471E-03	-.100E-02	-.856E-03
19	27	3	4.42	.536E-02	-.955E-02	-.372E-02	-.134E-01	-.126E-01
20	47	0	1.40	.135E-03	.143E-02	.898E-03	-.903E-02	.910E-03
20	47	1	1.29	-.103E-02	.198E-02	.715E-03	-.124E-01	-.476E-02
20	47	2	1.17	.157E-03	.160E-02	.839E-03	-.103E-01	.134E-02
20	47	3	1.62	-.146E-02	.244E-02	.101E-02	-.149E-01	-.595E-02
20	28	0	-1.40	-.135E-03	-.143E-02	-.898E-03	-.506E-02	.420E-03
20	28	1	-1.29	.103E-02	-.198E-02	-.715E-03	-.710E-02	-.532E-02
20	28	2	-1.17	-.157E-03	-.160E-02	-.839E-03	-.534E-02	.204E-03
20	28	3	-1.62	.146E-02	-.244E-02	-.101E-02	-.910E-02	-.838E-02

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
21	41	0	-1.47	.844E-03	-.637E-03	-.245E-03	.183E-02	.404E-02
21	41	1	-1.51	.504E-02	-.419E-02	-.105E-02	.147E-01	.217E-01
21	41	2	-1.38	.126E-02	-.261E-02	-.183E-03	.905E-02	.632E-02
21	41	3	-1.78	.801E-02	-.121E-01	-.192E-02	.433E-01	.348E-01
21	28	0	1.47	-.844E-03	.637E-03	.245E-03	.181E-02	.782E-03
21	28	1	1.51	-.504E-02	.419E-02	.105E-02	.918E-02	.715E-02
21	28	2	1.38	-.126E-02	.261E-02	.183E-03	.586E-02	.888E-03
21	28	3	1.78	-.801E-02	.121E-01	.192E-02	.257E-01	.110E-01
22	49	0	2.13	-.121E-02	.250E-02	.110E-02	-.147E-01	-.380E-02
22	49	1	2.15	-.129E-02	.239E-02	.162E-02	-.138E-01	-.435E-02
22	49	2	2.15	-.840E-03	.313E-02	-.136E-02	-.189E-01	-.101E-02
22	49	3	2.56	-.128E-02	.279E-02	-.712E-04	-.158E-01	-.401E-02
22	29	0	-2.13	.121E-02	-.250E-02	-.110E-02	-.995E-02	-.814E-02
22	29	1	-2.15	.129E-02	-.239E-02	-.162E-02	-.967E-02	-.837E-02
22	29	2	-2.15	.840E-03	-.313E-02	.136E-02	-.118E-01	-.725E-02
22	29	3	-2.56	.128E-02	-.279E-02	.712E-04	-.117E-01	-.861E-02
23	43	0	-1.87	.600E-02	-.807E-03	-.102E-02	.230E-02	.235E-01
23	43	1	-1.47	.573E-02	-.526E-03	-.117E-02	.183E-02	.219E-01
23	43	2	-3.33	.751E-02	-.279E-02	-.304E-03	.749E-02	.322E-01
23	43	3	-2.24	.726E-02	-.198E-02	-.750E-03	.613E-02	.298E-01
23	29	0	1.87	-.600E-02	.807E-03	.102E-02	.231E-02	.108E-01
23	29	1	1.47	-.573E-02	.526E-03	.117E-02	.118E-02	.108E-01
23	29	2	3.33	-.751E-02	.279E-02	.304E-03	.843E-02	.107E-01
23	29	3	2.24	-.726E-02	.198E-02	.750E-03	.517E-02	.116E-01
24	48	0	2.11	-.121E-02	.250E-02	.116E-02	-.147E-01	-.371E-02
24	48	1	1.97	-.963E-03	.246E-02	.667E-03	-.147E-01	-.261E-02
24	48	2	2.84	-.237E-02	.279E-02	.352E-02	-.152E-01	-.895E-02
24	48	3	2.63	-.199E-02	.273E-02	.262E-02	-.155E-01	-.732E-02
24	30	0	-2.11	.121E-02	-.250E-02	-.116E-02	-.989E-02	-.813E-02
24	30	1	-1.97	.963E-03	-.246E-02	-.667E-03	-.946E-02	-.685E-02
24	30	2	-2.84	.237E-02	-.279E-02	-.352E-02	-.122E-01	-.143E-01
24	30	3	-2.63	-.199E-02	-.273E-02	-.262E-02	-.113E-01	-.122E-01
25	42	0	-1.86	.599E-02	-.814E-03	-.106E-02	.235E-02	.234E-01
25	42	1	-2.14	.537E-02	.417E-03	-.684E-03	-.264E-02	.212E-01
25	42	2	-.245	.909E-02	-.693E-02	-.292E-02	.269E-01	.346E-01
25	42	3	-1.05	.832E-02	-.410E-02	-.245E-02	.152E-01	.318E-01
25	30	0	1.86	-.599E-02	.814E-03	.106E-02	.230E-02	.108E-01
25	30	1	2.14	-.537E-02	-.417E-03	.684E-03	.263E-03	.951E-02
25	30	2	.245	-.909E-02	.693E-02	.292E-02	.127E-01	.173E-01
25	30	3	1.05	-.832E-02	.410E-02	.245E-02	.818E-02	.157E-01

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
26	50	0	2.12	-.115E-02	.249E-02	.113E-02	-.146E-01	-.344E-02
26	50	1	2.24	-.131E-02	.263E-02	.111E-02	-.153E-01	-.400E-02
26	50	2	1.34	-.331E-03	.165E-02	.140E-02	-.101E-01	-.894E-03
26	50	3	1.76	-.391E-03	.174E-02	.180E-02	-.101E-01	-.542E-03
26	31	0	-2.12	.115E-02	-.249E-02	-.113E-02	-.985E-02	-.786E-02
26	31	1	-2.24	.131E-02	-.263E-02	-.111E-02	-.105E-01	-.887E-02
26	31	2	-1.34	.331E-03	-.165E-02	-.140E-02	-.609E-02	-.236E-02
26	31	3	-1.76	.391E-03	-.174E-02	-.180E-02	-.698E-02	-.330E-02
27	44	0	-1.86	.581E-02	-.773E-03	-.994E-03	.219E-02	.227E-01
27	44	1	-1.97	.668E-02	-.228E-02	-.123E-02	.763E-02	.265E-01
27	44	2	-.769	.103E-02	.659E-02	.300E-03	-.239E-01	.248E-02
27	44	3	-.824	.202E-02	.284E-02	-.249E-03	-.103E-01	.671E-02
27	31	0	1.86	-.581E-02	.773E-03	.994E-03	.223E-02	.105E-01
27	31	1	1.97	-.668E-02	.228E-02	.123E-02	.540E-02	.117E-01
27	31	2	.769	-.103E-02	.659E-02	-.300E-03	-.137E-01	.338E-02
27	31	3	.824	-.202E-02	-.284E-02	.249E-03	-.594E-02	.484E-02
28	17	0	.214	-.400E-02	.231E-02	.858E-05	-.672E-02	-.117E-01
28	17	1	.213	-.402E-02	.220E-02	.222E-03	-.643E-02	-.117E-01
28	17	2	.157	-.321E-01	.411E-01	.111	.350E-01	-.809E-01
28	17	3	.285	-.349E-01	.451E-01	.119	.369E-01	-.944E-01
28	18	0	-.214	.400E-02	-.231E-02	-.858E-05	-.369E-02	-.633E-02
28	18	1	-.213	.402E-02	-.220E-02	-.222E-03	-.346E-02	-.641E-02
28	18	2	-.157	.321E-01	-.411E-01	-.111	-.220	-.636E-01
28	18	3	-.285	.349E-01	-.451E-01	-.119	-.240	-.629E-01
29	18	0	.193E-01	-.345E-03	.196E-03	-.602E-05	-.997E-03	-.180E-02
29	18	1	.194E-01	-.411E-03	.112E-03	.216E-03	-.887E-03	-.195E-02
29	18	2	.894E-02	.184E-01	.124	.642E-01	-.542	.121
29	18	3	.468E-01	.138E-01	.115	.712E-01	-.516	.107
29	19	0	-.193E-01	.345E-03	-.196E-03	.602E-05	.113E-03	.252E-03
29	19	1	-.194E-01	.411E-03	-.112E-03	-.216E-03	.384E-03	.985E-04
29	19	2	-.894E-02	-.184E-01	-.124	-.642E-01	-.159E-01	-.384E-01
29	19	3	-.468E-01	-.138E-01	-.115	-.712E-01	-.300E-02	-.448E-01
30	20	0	.216	.403E-02	.233E-02	-.557E-05	.677E-02	.117E-01
30	20	1	.215	.393E-02	.242E-02	.197E-03	-.705E-02	.114E-01
30	20	2	.158	.320E-01	.398E-01	-.112	.384E-01	.809E-01
30	20	3	.290	.309E-01	.456E-01	-.103	.269E-01	.797E-01
30	21	0	-.216	-.403E-02	-.233E-02	.557E-05	-.372E-02	.641E-02
30	21	1	-.215	-.393E-02	-.242E-02	-.197E-03	-.382E-02	.628E-02
30	21	2	-.158	-.320E-01	-.398E-01	.112	-.217	.629E-01
30	21	3	-.290	-.309E-01	-.456E-01	.103	-.232	.596E-01

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
31	21	0	.194E-01	.311E-03	.178E-03	.325E-05	-.964E-03	.172E-02
31	21	1	.194E-01	.269E-03	.297E-03	.196E-03	-.117E-02	.170E-02
31	21	2	.932E-02	-.182E-01	.123	-.661E-01	-.539	-.121
31	21	3	.477E-01	-.203E-01	.123	-.636E-01	-.534	-.123
31	22	0	-.194E-01	-.311E-03	-.178E-03	-.325E-05	.162E-03	-.321E-03
31	22	1	-.194E-01	-.269E-03	-.297E-03	-.196E-03	-.165E-03	-.493E-03
31	22	2	-.932E-02	.182E-01	-.123	.661E-01	-.126E-01	.391E-01
31	22	3	-.477E-01	.203E-01	-.123	.636E-01	-.194E-01	.316E-01
32	23	0		.187	.109E-05	-.409E-02	-.285E-05	.120E-01
32	23	1		.189	.114E-03	-.416E-02	.176E-03	.122E-01
32	23	2		.244	-.704E-03	.861E-01	-.116E-02	-.645E-01
32	23	3		.104	.387E-03	.882E-01	.522E-02	-.678E-01
32	24	0		-.187	-.109E-05	.409E-02	.285E-05	.639E-02
32	24	1		-.189	-.114E-03	.416E-02	-.176E-03	.649E-02
32	24	2		-.244	.704E-03	-.861E-01	.116E-02	-.323
32	24	3		-.104	-.387E-03	-.882E-01	-.522E-02	-.329
33	24	0	.201E-01	-.983E-06	-.586E-03	.262E-05	.223E-02	-.116E-04
33	24	1	.201E-01	.108E-03	-.552E-03	.179E-03	.208E-02	.159E-03
33	24	2	.395E-01	-.459E-03	.930E-01	-.109E-02		-.336
33	24	3	.566E-01	.500E-02	.893E-01	.203E-02		.139E-01
33	25	0	-.201E-01	.983E-06	.586E-03	-.262E-05	.408E-03	.719E-05
33	25	1	-.201E-01	-.108E-03	.552E-03	-.179E-03	.407E-03	.329E-03
33	25	2	-.395E-01	.459E-03	-.930E-01	.109E-02	-.825E-01	-.182E-02
33	25	3	-.566E-01	-.500E-02	-.893E-01	-.203E-02	-.744E-01	.862E-02
34	9	0		.316	.542E-02	.421E-05	-.155E-04	.166E-04
34	9	1		.314	.534E-02	-.102E-03	-.280E-03	.834E-03
34	9	2		.271	.147E-01	.207E-01	-.707E-01	-.130E-01
34	9	3		.481	.187E-01	.642E-01	-.786E-01	-.266
34	17	0		-.316	-.542E-02	-.421E-05	.155E-04	-.865E-05
34	17	1		-.314	-.534E-02	.102E-03	.280E-03	-.223E-03
34	17	2		-.271	-.147E-01	-.207E-01	.707E-01	-.111
34	17	3		-.481	-.187E-01	-.642E-01	.786E-01	-.119
35	10	0	-.569E-01	.330E-02	-.723E-05	-.439E-05	.288E-04	.104E-01
35	10	1	-.551E-01	.332E-02	-.179E-05	-.415E-03	.443E-05	.105E-01
35	10	2	-.474E-01	-.330E-01	.806E-01		.121	.439
35	10	3		-.104	-.302E-01	-.387E-01	-.133	.186
35	18	0	.569E-01	-.330E-02	.723E-05	.439E-05	.146E-04	.939E-02
35	18	1	.551E-01	-.332E-02	.179E-05	.415E-03	.633E-05	.941E-02
35	18	2	.474E-01	.330E-01	.806E-01		.121	.449E-01
35	18	3		.104	.302E-01	.387E-01	.133	.457E-01

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
36	11	0	-.397E-03	-.224E-03	.223E-05	.280E-04	-.738E-05	-.107E-02
36	11	1	-.411E-03	-.242E-03	.108E-03	-.283E-03	-.866E-03	-.118E-02
36	11	2	-.469E-01	.108E-01	-.116	-.571E-02	.634	.231E-01
36	11	3	-.369E-01	.101E-01	-.672E-01	-.198E-01	.332	.200E-01
36	19	0	.397E-03	.224E-03	-.223E-05	-.280E-04	-.602E-05	-.275E-03
36	19	1	.411E-03	.242E-03	-.108E-03	.283E-03	.216E-03	-.277E-03
36	19	2	.469E-01	-.108E-01	.116	.571E-02	.640E-01	.415E-01
36	19	3	.369E-01	-.101E-01	-.672E-01	.198E-01	.709E-01	.407E-01
37	10	0	-.389	.000	.000	.000	.000	.000
37	10	1	-.387	.000	.000	.000	.000	.000
37	10	2	-.278	.000	.000	.000	.000	.000
37	10	3	-.525	.000	.000	.000	.000	.000
37	17	0	.389	.000	.000	.000	.000	.000
37	17	1	.387	.000	.000	.000	.000	.000
37	17	2	.278	.000	.000	.000	.000	.000
37	17	3	.525	.000	.000	.000	.000	.000
38	11	0	.658E-01	.000	.000	.000	.000	.000
38	11	1	.636E-01	.000	.000	.000	.000	.000
38	11	2	-.717E-01	.000	.000	.000	.000	.000
38	11	3	.160E-01	.000	.000	.000	.000	.000
38	18	0	-.658E-01	.000	.000	.000	.000	.000
38	18	1	-.636E-01	.000	.000	.000	.000	.000
38	18	2	.717E-01	.000	.000	.000	.000	.000
38	18	3	-.160E-01	.000	.000	.000	.000	.000
39	9	0	.318	.546E-02	-.288E-05	.889E-05	.117E-04	.192E-01
39	9	1	.316	.536E-02	-.124E-03	-.409E-03	.939E-03	.188E-01
39	9	2	.272	.141E-01	-.195E-01	.739E-01	.413E-02	.349E-01
39	9	3	.512	.163E-01	-.170E-01	.635E-01	-.174E-02	.438E-01
39	20	0	-.318	-.546E-02	.288E-05	-.889E-05	.560E-05	.135E-01
39	20	1	-.316	-.536E-02	.124E-03	.409E-03	-.198E-03	.134E-01
39	20	2	-.272	-.141E-01	.195E-01	-.739E-01	.113	.497E-01
39	20	3	-.512	-.163E-01	.170E-01	-.635E-01	.104	.543E-01
40	10	0	-.597E-01	.330E-02	.434E-05	.403E-05	-.173E-04	.104E-01
40	10	1	-.573E-01	.332E-02	-.260E-05	-.334E-03	.147E-04	.105E-01
40	10	2	-.466E-01	-.340E-01	.804E-01	.124	-.438	-.638E-01
40	10	3	-.898E-01	-.338E-01	.782E-01	.113	-.431	-.626E-01
40	21	0	.597E-01	-.330E-02	-.434E-05	-.403E-05	-.879E-05	.938E-02
40	21	1	.573E-01	-.332E-02	.260E-05	.334E-03	.842E-06	.941E-02
40	21	2	.466E-01	.340E-01	-.804E-01	-.124	-.448E-01	-.140
40	21	3	.898E-01	.338E-01	-.782E-01	-.113	-.382E-01	-.140

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
41	11	0	-.359E-03	-.262E-03	-.108E-05	-.205E-04	.325E-05	-.121E-02
41	11	1	-.381E-03	-.274E-03	.121E-03	-.389E-03	-.923E-03	-.130E-02
41	11	2	-.469E-01	.104E-01	.115	.905E-02	-.623	.221E-01
41	11	3	-.363E-01	.908E-02	.125	-.469E-03	-.686	.171E-01
41	22	0	.359E-03	.262E-03	.108E-05	.205E-04	.325E-05	-.359E-03
41	22	1	.381E-03	.274E-03	-.121E-03	.389E-03	.196E-03	-.344E-03
41	22	2	.469E-01	-.104E-01	-.115	-.905E-02	-.659E-01	.404E-01
41	22	3	.363E-01	-.908E-02	-.125	.469E-03	-.634E-01	.374E-01
42	10	0	-.392	.000	.000	.000	.000	.000
42	10	1	-.390	.000	.000	.000	.000	.000
42	10	2	-.280	.000	.000	.000	.000	.000
42	10	3	-.567	.000	.000	.000	.000	.000
42	20	0	.392	.000	.000	.000	.000	.000
42	20	1	.390	.000	.000	.000	.000	.000
42	20	2	.280	.000	.000	.000	.000	.000
42	20	3	.567	.000	.000	.000	.000	.000
43	11	0	.692E-01	.000	.000	.000	.000	.000
43	11	1	.663E-01	.000	.000	.000	.000	.000
43	11	2	-.729E-01	.000	.000	.000	.000	.000
43	11	3	-.888E-03	.000	.000	.000	.000	.000
43	21	0	-.692E-01	.000	.000	.000	.000	.000
43	21	1	-.663E-01	.000	.000	.000	.000	.000
43	21	2	.729E-01	.000	.000	.000	.000	.000
43	21	3	.888E-03	.000	.000	.000	.000	.000
44	9	0	.309	.433E-02	-.109E-05	.637E-05	.433E-05	.166E-01
44	9	1	.313	.446E-02	-.108E-03	-.321E-03	.892E-03	.172E-01
44	9	2	.328	-.127E-01	.492E-03	.182E-02	-.439E-02	-.191E-01
44	9	3	.170	-.143E-01	.254E-01	-.626E-02	-.162	-.265E-01
44	23	0	-.309	-.433E-02	.109E-05	-.637E-05	.288E-05	.120E-01
44	23	1	-.313	-.446E-02	.108E-03	.321E-03	-.176E-03	.122E-01
44	23	2	-.328	.127E-01	-.492E-03	-.182E-02	.115E-02	-.645E-01
44	23	3	-.170	-.143E-01	-.254E-01	.626E-02	-.517E-02	-.678E-01
45	10	0	-.167E-01	.274E-02	.246E-05	.328E-06	-.108E-04	.945E-02
45	10	1	-.203E-01	.270E-02	.119E-05	-.353E-03	-.440E-05	.923E-02
45	10	2	.386E-01	.636E-01	.206E-03	.206E-02	-.117E-02	.143
45	10	3	.313	.645E-01	.233E-01	-.775E-02	-.157	.147
45	24	0	.167E-01	-.274E-02	-.246E-05	-.328E-06	-.545E-05	.862E-02
45	24	1	.203E-01	-.270E-02	-.119E-05	.353E-03	-.348E-05	.856E-02
45	24	2	-.386E-01	-.636E-01	-.206E-03	-.206E-02	-.187E-03	.276
45	24	3	-.313	-.645E-01	-.233E-01	.775E-02	.369E-02	.279

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
46	11	0	-.586E-03	.842E-04	-.925E-06	-.719E-05	.349E-05	.147E-03
46	11	1	-.552E-03	.113E-03	.108E-03	-.329E-03	-.891E-03	.336E-03
46	11	2	.930E-01	-.193E-01	-.247E-03	.163E-02	.273E-02	-.451E-01
46	11	3	.711E-01	-.162E-01	.321E-01	-.917E-02	-.214	-.324E-01
46	25	0	.586E-03	-.842E-04	.925E-06	.719E-05	.262E-05	.408E-03
46	25	1	.552E-03	-.113E-03	-.108E-03	.329E-03	.179E-03	.407E-03
46	25	2	-.930E-01	.193E-01	.247E-03	-.163E-02	-.110E-02	-.825E-01
46	25	3	-.711E-01	.162E-01	-.321E-01	.917E-02	.209E-02	-.744E-01
47	10	0	-.370	.000	.000	.000	.000	.000
47	10	1	-.374	.000	.000	.000	.000	.000
47	10	2	-.502	.000	.000	.000	.000	.000
47	10	3	-.335	.000	.000	.000	.000	.000
47	23	0	.370	.000	.000	.000	.000	.000
47	23	1	.374	.000	.000	.000	.000	.000
47	23	2	.502	.000	.000	.000	.000	.000
47	23	3	.335	.000	.000	.000	.000	.000
48	11	0	.160E-01	.000	.000	.000	.000	.000
48	11	1	.202E-01	.000	.000	.000	.000	.000
48	11	2	.192	.000	.000	.000	.000	.000
48	11	3	-.177	.000	.000	.000	.000	.000
48	24	0	-.160E-01	.000	.000	.000	.000	.000
48	24	1	-.202E-01	.000	.000	.000	.000	.000
48	24	2	-.192	.000	.000	.000	.000	.000
48	24	3	.177	.000	.000	.000	.000	.000
49	32	0	.320E-01	-.147E-03	.850E-04	.431E-07	-.175E-03	-.304E-03
49	32	1	.320E-01	-.146E-03	.844E-04	-.112E-06	-.169E-03	-.291E-03
49	32	2	-1.24	.217E-01	-.369E-01	.340E-01	-.213E-01	-.873E-01
49	32	3	.801E-01	.227E-01	-.357E-01	.370E-01	-.215E-01	-.916E-01
49	33	0	-.320E-01	.147E-03	-.850E-04	-.431E-07	-.165E-03	-.285E-03
49	33	1	-.320E-01	.146E-03	-.844E-04	.112E-06	-.168E-03	-.293E-03
49	33	2	1.24	-.217E-01	.369E-01	-.340E-01	.169	.174
49	33	3	-.801E-01	-.227E-01	-.357E-01	-.370E-01	.164	.182
50	34	0	.383E-01	.386E-03	.222E-03	.262E-07	-.448E-03	.789E-03
50	34	1	.383E-01	.382E-03	.223E-03	-.556E-07	-.470E-03	.749E-03
50	34	2	.393E-01	.499E-01	-.987E-01	-.401E-02	.196	.102
50	34	3	.710E-01	.503E-01	-.101	-.404E-02	.201	.103
50	35	0	-.383E-01	-.386E-03	-.222E-03	-.262E-07	-.441E-03	.756E-03
50	35	1	-.383E-01	-.382E-03	-.223E-03	.556E-07	-.420E-03	.781E-03
50	35	2	-.393E-01	-.499E-01	.987E-01	.401E-02	.199	.976E-01
50	35	3	-.710E-01	-.503E-01	.101	.404E-02	.204	.983E-01

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
51	13	0	.666E-01	.143E-03	-.269E-06	-.207E-06	.166E-05	.505E-03
51	13	1	.666E-01	.131E-03	.660E-06	.717E-06	-.409E-05	.452E-03
51	13	2	.242E-01	.662E-02	.257E-02	-.242E-01	.191E-01	.137E-01
51	13	3	.121	.207E-01	.282E-01	-.254E-01	-.115	.422E-01
51	32	0	-.666E-01	-.143E-03	.269E-06	.207E-06	-.500E-07	.351E-03
51	32	1	-.666E-01	-.131E-03	-.660E-06	-.717E-06	.129E-06	.337E-03
51	32	2	-.242E-01	-.662E-02	-.257E-02	.242E-01	-.345E-01	.260E-01
51	32	3	-.121	-.207E-01	-.282E-01	.254E-01	-.540E-01	.817E-01
52	15	0	-.171E-03	.132E-03	-.598E-06	.589E-07	.355E-05	.464E-03
52	15	1	-.168E-03	.140E-03	.153E-05	-.422E-06	-.910E-05	.502E-03
52	15	2	-.545	-.335E-01	-.331	-.240E-01	1.82	.383E-01
52	15	3	-.196	-.299E-01	-.297	-.254E-01	1.70	.524E-01
52	33	0	.171E-03	-.132E-03	.598E-06	-.589E-07	.365E-07	.329E-03
52	33	1	.168E-03	-.140E-03	-.153E-05	.422E-06	-.953E-07	.338E-03
52	33	2	.545	.335E-01	.331	.240E-01	.166	-.239
52	33	3	.196	.299E-01	.297	.254E-01	.852E-01	-.232
53	15	0	-.798E-01	.000	.000	.000	.000	.000
53	15	1	-.798E-01	.000	.000	.000	.000	.000
53	15	2	-.158	.000	.000	.000	.000	.000
53	15	3	-.184	.000	.000	.000	.000	.000
53	32	0	.798E-01	.000	.000	.000	.000	.000
53	32	1	.798E-01	.000	.000	.000	.000	.000
53	32	2	.158	.000	.000	.000	.000	.000
53	32	3	.184	.000	.000	.000	.000	.000
54	13	0	.856E-01	.526E-03	.864E-06	.632E-05	-.517E-05	.225E-02
54	13	1	.856E-01	.479E-03	-.261E-05	-.330E-04	.156E-04	.199E-02
54	13	2	.872E-01	-.303E-02	.109	.221	-.660	-.495E-02
54	13	3	.197	-.364E-02	.124	.225	-.745	-.567E-02
54	34	0	-.856E-01	-.526E-03	-.864E-06	-.632E-05	-.140E-07	.908E-03
54	34	1	-.856E-01	-.479E-03	.261E-05	.330E-04	.776E-08	.884E-03
54	34	2	-.872E-01	.303E-02	-.109	-.221	.364E-02	-.132E-01
54	34	3	-.197	.364E-02	-.124	-.225	.357E-02	-.161E-01
55	15	0	-.446E-03	.485E-03	-.888E-07	-.389E-05	.495E-06	.204E-02
55	15	1	-.442E-03	.518E-03	-.530E-06	.267E-04	.329E-05	.222E-02
55	15	2	-.207	-.342E-02	.237	.220	-.1.42	.114E-02
55	15	3	-.198	-.400E-02	.247	.225	-.1.48	.109E-02
55	35	0	.446E-03	-.485E-03	.888E-07	.389E-05	.381E-07	.875E-03
55	35	1	.442E-03	-.518E-03	.530E-06	-.267E-04	-.105E-06	.886E-03
55	35	2	.207	.342E-02	-.237	-.220	-.454E-02	-.217E-01
55	35	3	.198	.400E-02	-.247	-.225	-.470E-02	-.251E-01

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
56	15	0	-.102	.000	.000	.000	.000	.000
56	15	1	-.102	.000	.000	.000	.000	.000
56	15	2	-.116	.000	.000	.000	.000	.000
56	15	3	-.240	.000	.000	.000	.000	.000
56	34	0	.102	.000	.000	.000	.000	.000
56	34	1	.102	.000	.000	.000	.000	.000
56	34	2	.116	.000	.000	.000	.000	.000
56	34	3	.240	.000	.000	.000	.000	.000
57	26	0	-1.76	.000	.000	.000	.000	.000
57	26	1	-2.14	.000	.000	.000	.000	.000
57	26	2	-2.11	.000	.000	.000	.000	.000
57	26	3	-3.02	.000	.000	.000	.000	.000
57	36	0	1.76	.000	.000	.000	.000	.000
57	36	1	2.14	.000	.000	.000	.000	.000
57	36	2	2.11	.000	.000	.000	.000	.000
57	36	3	3.02	.000	.000	.000	.000	.000
58	28	0	-1.76	.000	.000	.000	.000	.000
58	28	1	-1.90	.000	.000	.000	.000	.000
58	28	2	-1.73	.000	.000	.000	.000	.000
58	28	3	-2.17	.000	.000	.000	.000	.000
58	36	0	1.76	.000	.000	.000	.000	.000
58	36	1	1.90	.000	.000	.000	.000	.000
58	36	2	1.73	.000	.000	.000	.000	.000
58	36	3	2.17	.000	.000	.000	.000	.000
59	28	0	-1.76	.000	.000	.000	.000	.000
59	28	1	-1.84	.000	.000	.000	.000	.000
59	28	2	-1.69	.000	.000	.000	.000	.000
59	28	3	-2.24	.000	.000	.000	.000	.000
59	37	0	1.76	.000	.000	.000	.000	.000
59	37	1	1.84	.000	.000	.000	.000	.000
59	37	2	1.69	.000	.000	.000	.000	.000
59	37	3	2.24	.000	.000	.000	.000	.000
60	27	0	-1.76	.000	.000	.000	.000	.000
60	27	1	-2.19	.000	.000	.000	.000	.000
60	27	2	-2.16	.000	.000	.000	.000	.000
60	27	3	-2.98	.000	.000	.000	.000	.000
60	37	0	1.76	.000	.000	.000	.000	.000
60	37	1	2.19	.000	.000	.000	.000	.000
60	37	2	2.16	.000	.000	.000	.000	.000
60	37	3	2.98	.000	.000	.000	.000	.000

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stat;

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
61	26	0	-1.76	.000	.000	.000	.000	.000
61	26	1	-1.26	.000	.000	.000	.000	.000
61	26	2	-1.44	.000	.000	.000	.000	.000
61	26	3	.114	.000	.000	.000	.000	.000
61	38	0	1.76	.000	.000	.000	.000	.000
61	38	1	1.26	.000	.000	.000	.000	.000
61	38	2	1.44	.000	.000	.000	.000	.000
61	38	3	-.114	.000	.000	.000	.000	.000
62	27	0	-1.76	.000	.000	.000	.000	.000
62	27	1	-1.20	.000	.000	.000	.000	.000
62	27	2	-1.39	.000	.000	.000	.000	.000
62	27	3	.567E-01	.000	.000	.000	.000	.000
62	38	0	1.76	.000	.000	.000	.000	.000
62	38	1	1.20	.000	.000	.000	.000	.000
62	38	2	1.39	.000	.000	.000	.000	.000
62	38	3	-.567E-01	.000	.000	.000	.000	.000
63	29	0	-2.13	.000	.000	.000	.000	.000
63	29	1	-2.27	.000	.000	.000	.000	.000
63	29	2	-1.79	.000	.000	.000	.000	.000
63	29	3	-2.29	.000	.000	.000	.000	.000
63	36	0	2.13	.000	.000	.000	.000	.000
63	36	1	2.27	.000	.000	.000	.000	.000
63	36	2	1.79	.000	.000	.000	.000	.000
63	36	3	2.29	.000	.000	.000	.000	.000
64	31	0	-2.12	.000	.000	.000	.000	.000
64	31	1	-2.25	.000	.000	.000	.000	.000
64	31	2	-1.11	.000	.000	.000	.000	.000
64	31	3	-1.08	.000	.000	.000	.000	.000
64	36	0	2.12	.000	.000	.000	.000	.000
64	36	1	2.25	.000	.000	.000	.000	.000
64	36	2	1.11	.000	.000	.000	.000	.000
64	36	3	1.08	.000	.000	.000	.000	.000
65	31	0	-2.12	.000	.000	.000	.000	.000
65	31	1	-2.25	.000	.000	.000	.000	.000
65	31	2	-1.54	.000	.000	.000	.000	.000
65	31	3	-1.85	.000	.000	.000	.000	.000
65	37	0	2.12	.000	.000	.000	.000	.000
65	37	1	2.25	.000	.000	.000	.000	.000
65	37	2	1.54	.000	.000	.000	.000	.000
65	37	3	1.85	.000	.000	.000	.000	.000

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
66	30	0	-2.13	.000	.000	.000	.000	.000
66	30	1	-2.27	.000	.000	.000	.000	.000
66	30	2	-1.36	.000	.000	.000	.000	.000
66	30	3	-1.66	.000	.000	.000	.000	.000
66	37	0	2.13	.000	.000	.000	.000	.000
66	37	1	2.27	.000	.000	.000	.000	.000
66	37	2	1.36	.000	.000	.000	.000	.000
66	37	3	1.66	.000	.000	.000	.000	.000
67	29	0	-2.13	.000	.000	.000	.000	.000
67	29	1	-1.85	.000	.000	.000	.000	.000
67	29	2	-3.25	.000	.000	.000	.000	.000
67	29	3	-2.31	.000	.000	.000	.000	.000
67	38	0	2.13	.000	.000	.000	.000	.000
67	38	1	1.85	.000	.000	.000	.000	.000
67	38	2	3.25	.000	.000	.000	.000	.000
67	38	3	2.31	.000	.000	.000	.000	.000
68	30	0	-2.13	.000	.000	.000	.000	.000
68	30	1	-1.85	.000	.000	.000	.000	.000
68	30	2	-3.68	.000	.000	.000	.000	.000
68	30	3	-3.02	.000	.000	.000	.000	.000
68	38	0	2.13	.000	.000	.000	.000	.000
68	38	1	1.85	.000	.000	.000	.000	.000
68	38	2	3.68	.000	.000	.000	.000	.000
68	38	3	3.02	.000	.000	.000	.000	.000
69	7	0	-.641	.334E-01	.144E-02	.175E-04	-.282E-02	.682E-01
69	7	1	-1.08	.269E-01	-.852E-01	-.233E-03	.168	.471E-01
69	7	2	-.955	.324E-01	-.101	-.169E-03	.200	.645E-01
69	7	3	-1.91	.509E-01	-.115	.288E-03	.229	.857E-01
69	39	0	.641	-.334E-01	-.144E-02	-.175E-04	-.170E-04	-.222E-02
69	39	1	1.08	-.269E-01	.852E-01	.233E-03	-.236E-03	.597E-02
69	39	2	.955	-.324E-01	.101	.169E-03	-.296E-03	-.548E-03
69	39	3	1.91	-.509E-01	.115	-.288E-03	-.692E-03	.148E-01
70	7	0	-.642	.334E-01	-.350E-02	-.343E-04	.686E-02	.681E-01
70	7	1	-.422	.383E-01	-.126	-.247E-01	2.47	.817E-01
70	7	2	-.482	.355E-01	-.757	-.376E-02	1.49	.731E-01
70	7	3	.315E-01	.841E-01	-.3.88	-.444E-01	7.61	.175
70	40	0	.642	-.334E-01	.350E-02	.343E-04	.483E-04	-.223E-02
70	40	1	.422	-.383E-01	1.26	.247E-01	.119E-01	-.625E-02
70	40	2	.482	-.355E-01	.757	.376E-02	.559E-02	-.312E-02
70	40	3	-.315E-01	-.841E-01	3.88	.444E-01	.404E-01	-.889E-02

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
71	7	0	-.641	.334E-01	.206E-02	.167E-04	-.403E-02	.681E-01
71	7	1	-.421	.381E-01	1.09	.238E-01	-2.13	.814E-01
71	7	2	-.481	.353E-01	.547	.280E-02	-1.07	.726E-01
71	7	3	.397E-01	.832E-01	3.59	.430E-01	-7.04	.173
71	41	0	.641	-.334E-01	-.206E-02	-.167E-04	-.313E-04	-.224E-02
71	41	1	.421	-.381E-01	-1.09	-.238E-01	-.123E-01	-.630E-02
71	41	2	.481	-.353E-01	-.547	-.280E-02	-.610E-02	-.296E-02
71	41	3	-.397E-01	-.832E-01	-3.59	-.430E-01	-.409E-01	-.919E-02
72	12	0	-.812	.445E-01	-.268E-02	-.156E-03	.525E-02	.100
72	12	1	-.934	.433E-01	-.322E-02	-.149E-03	.631E-02	.961E-01
72	12	2	-.300	.506E-01	-.805	-.111E-02	1.59	.121
72	12	3	-.622	.808E-01	-.800	-.516E-03	1.58	.178
72	42	0	.812	-.445E-01	.268E-02	.156E-03	.347E-04	-.123E-01
72	42	1	.934	-.433E-01	.322E-02	.149E-03	.400E-04	-.106E-01
72	42	2	.300	-.506E-01	.805	.111E-02	-.223E-02	-.212E-01
72	42	3	.622	-.808E-01	.800	.516E-03	-.397E-02	-.185E-01
73	12	0	-.816	.443E-01	.873E-02	.703E-03	-.171E-01	.994E-01
73	12	1	-.753	.449E-01	-.482	-.442E-02	.945	.101
73	12	2	-1.07	.323E-01	1.68	.287E-01	-.3.29	.776E-01
73	12	3	-.877	.722E-01	.353	.227E-01	-.675	.151
73	43	0	.816	-.443E-01	-.873E-02	-.703E-03	-.964E-04	-.121E-01
73	43	1	.753	-.449E-01	.482	.442E-02	.583E-02	-.129E-01
73	43	2	1.07	-.323E-01	-.1.68	-.287E-01	-.342E-01	-.139E-01
73	43	3	.877	-.722E-01	-.353	-.227E-01	-.203E-01	-.847E-02
74	12	0	-.817	.442E-01	-.605E-02	-.547E-03	.119E-01	.992E-01
74	12	1	-.754	.448E-01	.486	.458E-02	-.951	.101
74	12	2	-1.07	.420E-01	-.3.29	-.282E-01	6.45	.843E-01
74	12	3	-.842	.675E-01	-.2.24	-.218E-01	4.41	.142
74	44	0	.817	-.442E-01	.605E-02	.547E-03	.618E-04	-.120E-01
74	44	1	.754	-.448E-01	-.486	-.458E-02	-.587E-02	-.128E-01
74	44	2	1.07	-.420E-01	3.29	.282E-01	.291E-01	-.151E-02
74	44	3	.842	-.675E-01	2.24	.218E-01	.156E-01	-.854E-02
75	39	0	-1.47	.835E-03	.620E-03	.240E-03	-.176E-02	.400E-02
75	39	1	-2.52	-.208E-02	-.263E-02	-.128E-02	.121E-01	-.668E-02
75	39	2	-2.25	.449E-03	-.136E-02	.837E-05	.687E-02	.245E-02
75	39	3	-4.54	-.524E-02	-.968E-02	-.326E-02	.418E-01	-.183E-01
75	26	0	1.47	-.835E-03	-.620E-03	-.240E-03	-.178E-02	.770E-03
75	26	1	2.52	.208E-02	.263E-02	.128E-02	.297E-02	-.520E-02
75	26	2	2.25	-.449E-03	.136E-02	-.837E-05	.931E-03	.116E-03
75	26	3	4.54	.524E-02	.968E-02	.326E-02	.135E-01	-.117E-01

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
76	41	0	-1.46	.843E-03	.628E-03	.245E-03	-.180E-02	.403E-02
76	41	1	-.399	-.312E-03	.310E-03	.121E-02	-.246E-02	-.268E-02
76	41	2	-.815	.973E-03	.617E-03	.780E-03	-.300E-02	.358E-02
76	41	3	1.90	-.148E-02	-.594E-03	.201E-02	-.254E-02	-.930E-02
76	27	0	1.46	-.843E-03	-.628E-03	-.245E-03	-.179E-02	.787E-03
76	27	1	.399	.312E-03	-.310E-03	-.121E-02	.684E-03	.901E-03
76	27	2	.815	-.973E-03	-.617E-03	-.780E-03	-.528E-03	.198E-02
76	27	3	-.1.90	.148E-02	.594E-03	-.201E-02	.594E-02	.828E-03
77	40	0	-1.47	.843E-03	.634E-03	.243E-03	-.181E-02	.404E-02
77	40	1	-1.60	.531E-02	.416E-02	.152E-02	-.145E-01	.222E-01
77	40	2	-1.49	.152E-02	.257E-02	.660E-03	-.876E-02	.680E-02
77	40	3	-1.96	.823E-02	.120E-01	.232E-02	-.428E-01	.352E-01
77	28	0	1.47	-.843E-03	-.634E-03	-.243E-03	-.181E-02	.778E-03
77	28	1	1.60	-.531E-02	-.416E-02	-.152E-02	-.925E-02	.817E-02
77	28	2	1.49	-.152E-02	-.257E-02	-.660E-03	-.594E-02	.191E-02
77	28	3	1.96	-.823E-02	-.120E-01	-.232E-02	-.257E-01	.118E-01
78	42	0	-1.86	.602E-02	.824E-03	.106E-02	-.238E-02	.236E-01
78	42	1	-2.14	.540E-02	-.405E-03	.681E-03	.260E-02	.213E-01
78	42	2	-1.07	.937E-02	.648E-02	.308E-02	-.247E-01	.358E-01
78	42	3	-1.87	.834E-02	.318E-02	.217E-02	-.113E-01	.323E-01
78	29	0	1.86	-.602E-02	-.824E-03	-.106E-02	-.233E-02	.109E-01
78	29	1	2.14	-.540E-02	.405E-03	-.681E-03	-.291E-03	.955E-02
78	29	2	1.07	-.937E-02	-.648E-02	-.308E-02	-.124E-01	.178E-01
78	29	3	1.87	-.834E-02	-.318E-02	-.217E-02	-.687E-02	.154E-01
79	44	0	-1.87	.595E-02	.793E-03	.101E-02	-.225E-02	.233E-01
79	44	1	-1.47	.568E-02	.509E-03	.115E-02	-.176E-02	.217E-01
79	44	2	-4.14	.738E-02	.229E-02	.357E-03	-.490E-02	.316E-01
79	44	3	-3.13	.694E-02	.193E-02	.418E-03	-.527E-02	.291E-01
79	30	0	1.87	-.595E-02	-.793E-03	-.101E-02	-.228E-02	.107E-01
79	30	1	1.47	-.568E-02	-.509E-03	-.115E-02	-.115E-02	.107E-01
79	30	2	4.14	-.738E-02	-.229E-02	-.357E-03	-.816E-02	.105E-01
79	30	3	3.13	-.694E-02	-.193E-02	-.418E-03	-.578E-02	.105E-01
80	43	0	-1.86	.582E-02	.777E-03	.101E-02	-.221E-02	.228E-01
80	43	1	-1.97	.669E-02	.228E-02	.123E-02	-.766E-02	.265E-01
80	43	2	-1.60	.110E-02	-.710E-02	-.192E-03	.266E-01	.264E-02
80	43	3	-1.88	.177E-02	-.361E-02	-.222E-03	.141E-01	.630E-02
80	31	0	1.86	-.582E-02	-.777E-03	-.101E-02	-.223E-02	.105E-01
80	31	1	1.97	-.669E-02	-.228E-02	-.123E-02	-.540E-02	.117E-01
80	31	2	1.60	-.110E-02	.710E-02	.192E-03	.140E-01	.367E-02
80	31	3	1.88	-.177E-02	.361E-02	.222E-03	.650E-02	.384E-02

HOUSATONIC CABLEVISION
 140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
81	6	0	.356	2.32	-.133E-03	-.215E-05	.259E-03	4.56
81	6	1	.330	2.16	.214	.134E-02	-.424	4.25
81	6	2	.301	1.96	.214	.132E-02	-.424	3.86
81	6	3	.187	1.04	.208	.106E-02	-.412	2.04
81	45	0	-.356	-2.32	.133E-03	.215E-05	.385E-05	.150E-01
81	45	1	-.330	-2.16	-.214	-.134E-02	.182E-02	.102E-01
81	45	2	-.301	-.1.96	-.214	-.132E-02	.184E-02	.154E-01
81	45	3	-.187	-.1.04	-.208	-.106E-02	.188E-02	.855E-02
82	6	0	.357	2.32	.375E-03	-.497E-06	-.730E-03	4.56
82	6	1	.369	2.39	.255	.833E-02	-.502	4.70
82	6	2	.383	2.49	.574E-01	-.160E-03	-.114	4.89
82	6	3	.516	3.14	.165	.510E-02	-.317	6.17
82	46	0	-.357	-2.32	-.375E-03	.497E-06	-.922E-05	.150E-01
82	46	1	-.369	-2.39	-.255	-.833E-02	-.177E-02	.173E-01
82	46	2	-.383	-2.49	-.574E-01	.160E-03	.578E-03	.146E-01
82	46	3	-.516	-.3.14	-.165	-.510E-02	-.768E-02	.188E-01
83	6	0	.357	2.32	-.242E-03	.266E-05	.471E-03	4.56
83	6	1	.369	2.40	.171	-.556E-02	-.343	4.71
83	6	2	.384	2.49	.370	.295E-02	-.731	4.90
83	6	3	.514	3.12	.274	-.221E-02	-.551	6.14
83	47	0	-.357	-2.32	.242E-03	-.266E-05	.538E-05	.150E-01
83	47	1	-.369	-2.40	-.171	.556E-02	.537E-02	.174E-01
83	47	2	-.384	-2.49	-.370	-.295E-02	.299E-02	.150E-01
83	47	3	-.514	-.3.12	-.274	.221E-02	.110E-01	.191E-01
84	11	0	.541	3.49	.159E-02	.643E-04	-.312E-02	6.86
84	11	1	.504	3.25	-.127E-02	.408E-04	.255E-02	6.40
84	11	2	.727	4.68	.656E-02	.213E-03	-.130E-01	9.20
84	11	3	.660	4.05	-.221	-.114E-02	.438	7.95
84	48	0	-.541	-.3.49	-.159E-02	-.643E-04	-.153E-04	.263E-01
84	48	1	-.504	-.3.25	.127E-02	-.408E-04	-.402E-04	.253E-01
84	48	2	-.727	-.4.68	-.656E-02	-.213E-03	.131E-04	.319E-01
84	48	3	-.660	-.4.05	.221	.114E-02	-.152E-02	.318E-01
85	11	0	.544	3.51	-.637E-02	-.323E-03	.125E-01	6.88
85	11	1	.561	3.62	.488E-01	-.539E-03	-.949E-01	7.10
85	11	2	.451	2.91	-.434	.125E-02	.848	5.71
85	11	3	.549	3.34	-.622	-.412E-02	1.22	6.56
85	49	0	-.544	-.3.51	.637E-02	.323E-03	.600E-04	.261E-01
85	49	1	-.561	-.3.62	-.488E-01	.539E-03	-.130E-02	.266E-01
85	49	2	-.451	-.2.91	.434	-.125E-02	.723E-02	.178E-01
85	49	3	-.549	-.3.34	.622	.412E-02	.262E-02	.240E-01

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
86	11	0	.545	3.51	.478E-02	.259E-03	-.937E-02	6.89
86	11	1	.562	3.62	-.560E-01	.444E-03	.109	7.11
86	11	2	.447	2.89	.459	-.117E-02	-.898	5.68
86	11	3	.549	3.34	.268	.136E-02	-.523	6.55
86	50	0	-.545	-3.51	-.478E-02	-.259E-03	-.447E-04	.260E-01
86	50	1	-.562	-3.62	.560E-01	-.444E-03	.127E-02	.265E-01
86	50	2	-.447	-2.89	-.459	.117E-02	-.700E-02	.286E-01
86	50	3	-.549	-3.34	-.268	-.136E-02	-.633E-02	.237E-01
87	45	0	1.39	.136E-03	-.143E-02	-.897E-03	.904E-02	.908E-03
87	45	1	1.48	.109E-02	-.119E-02	.658E-03	.730E-02	.513E-02
87	45	2	1.37	.347E-03	-.138E-02	-.282E-03	.896E-02	.187E-02
87	45	3	.754	.244E-02	-.124E-02	.333E-02	.965E-02	.112E-01
87	26	0	-1.39	-.136E-03	.143E-02	.897E-03	.506E-02	.429E-03
87	26	1	-1.48	-.109E-02	.119E-02	-.658E-03	.438E-02	.557E-02
87	26	2	-1.37	-.347E-03	.138E-02	.282E-03	.457E-02	.154E-02
87	26	3	-.754	-.244E-02	.124E-02	-.333E-02	.254E-02	.128E-01
88	47	0	1.40	.133E-03	-.143E-02	-.899E-03	.903E-02	.894E-03
88	47	1	1.60	.244E-03	-.974E-03	-.285E-02	.616E-02	.177E-02
88	47	2	1.83	-.215E-03	-.117E-02	-.179E-02	.654E-02	-.113E-02
88	47	3	2.11	-.293E-03	-.535E-03	-.550E-02	.234E-02	-.198E-02
88	27	0	-1.40	-.133E-03	.143E-02	.899E-03	.506E-02	.417E-03
88	27	1	-1.60	-.244E-03	.974E-03	.285E-02	.342E-02	.625E-03
88	27	2	-1.83	.215E-03	.117E-02	.179E-02	.496E-02	-.979E-03
88	27	3	-2.11	.293E-03	.535E-03	.550E-02	.292E-02	-.897E-03
89	46	0	1.40	.136E-03	-.143E-02	-.895E-03	.904E-02	.914E-03
89	46	1	1.66	-.119E-02	-.168E-02	-.112E-02	.980E-02	-.572E-02
89	46	2	1.55	-.157E-04	-.129E-02	-.123E-02	.778E-02	.350E-03
89	46	3	2.00	-.161E-02	-.215E-02	-.132E-02	.124E-01	-.688E-02
89	28	0	-1.40	-.136E-03	.143E-02	.895E-03	.506E-02	.424E-03
89	28	1	-1.66	.119E-02	.168E-02	.112E-02	.667E-02	-.602E-02
89	28	2	-1.55	.157E-04	.129E-02	.123E-02	.491E-02	-.505E-03
89	28	3	-2.00	.161E-02	.215E-02	.132E-02	.871E-02	-.894E-02
90	48	0	2.12	-.122E-02	-.251E-02	-.115E-02	.147E-01	-.378E-02
90	48	1	1.97	-.972E-03	-.247E-02	-.653E-03	.148E-01	-.266E-02
90	48	2	2.85	-.240E-02	-.275E-02	-.338E-02	.150E-01	-.906E-02
90	48	3	2.23	-.187E-02	-.294E-02	-.214E-02	.174E-01	-.643E-02
90	29	0	-2.12	.122E-02	.251E-02	.115E-02	.992E-02	-.819E-02
90	29	1	-1.97	.972E-03	.247E-02	.653E-03	.949E-02	-.690E-02
90	29	2	-2.85	.240E-02	.275E-02	.338E-02	.120E-01	-.145E-01
90	29	3	-2.23	.187E-02	.294E-02	.214E-02	.115E-01	-.119E-01

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Static

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
91	50	0	2.13	-.120E-02	-.250E-02	-.110E-02	.146E-01	-.373E-02
91	50	1	2.15	-.128E-02	-.239E-02	-.161E-02	.138E-01	-.427E-02
91	50	2	2.16	-.782E-03	-.304E-02	.149E-02	.185E-01	-.847E-03
91	50	3	2.23	-.110E-02	-.300E-02	.572E-03	.178E-01	-.309E-02
91	30	0	-2.13	.120E-02	.250E-02	.110E-02	.994E-02	-.807E-02
91	30	1	-2.15	.128E-02	.239E-02	.161E-02	.967E-02	-.830E-02
91	30	2	-2.16	.782E-03	.304E-02	-.149E-02	.114E-01	-.684E-02
91	30	3	-2.23	.110E-02	.300E-02	-.572E-03	.117E-01	-.768E-02
92	49	0	2.12	-.115E-02	-.249E-02	-.114E-02	.146E-01	-.344E-02
92	49	1	2.24	-.131E-02	-.263E-02	-.111E-02	.154E-01	-.398E-02
92	49	2	1.37	-.333E-03	-.161E-02	-.129E-02	.100E-01	-.925E-03
92	49	3	1.43	-.170E-03	-.202E-02	-.107E-02	.128E-01	.668E-03
92	31	0	-2.12	.115E-02	.249E-02	.114E-02	.984E-02	-.787E-02
92	31	1	-2.24	.131E-02	.263E-02	.111E-02	.105E-01	-.888E-02
92	31	2	-1.37	.333E-03	.161E-02	.129E-02	.578E-02	-.235E-02
92	31	3	-1.43	.170E-03	.202E-02	.107E-02	.705E-02	-.234E-02
93	1	0	.000	.000	.000	.000	.000	.000
93	1	1	.000	.000	.000	.000	.000	.000
93	1	2	.000	.000	.000	.000	.000	.000
93	1	3	.000	.000	.000	.000	.000	.000
93	2	0	.000	.000	.000	.000	.000	.000
93	2	1	.000	.000	.000	.000	.000	.000
93	2	2	.000	.000	.000	.000	.000	.000
93	2	3	.000	.000	.000	.000	.000	.000
94	1	0	.000	.000	.000	.000	.000	.000
94	1	1	.000	.000	.000	.000	.000	.000
94	1	2	.000	.000	.000	.000	.000	.000
94	1	3	.000	.000	.000	.000	.000	.000
94	2	0	.000	.000	.000	.000	.000	.000
94	2	1	.000	.000	.000	.000	.000	.000
94	2	2	.000	.000	.000	.000	.000	.000
94	2	3	.000	.000	.000	.000	.000	.000
95	1	0	.000	.000	.000	.000	.000	.000
95	1	1	.000	.000	.000	.000	.000	.000
95	1	2	.000	.000	.000	.000	.000	.000
95	1	3	.000	.000	.000	.000	.000	.000
95	2	0	.000	.000	.000	.000	.000	.000
95	2	1	.000	.000	.000	.000	.000	.000
95	2	2	.000	.000	.000	.000	.000	.000
95	2	3	.000	.000	.000	.000	.000	.000

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

Memb	Node	LC	FX	FY	FZ	MX	MY	MZ
96	51	0	20.9	-.245E-04	-.134E-03	-.929E-08	-.852E-02	.155E-02
96	51	1	20.9	-.475E-03	-1.06	.232	12.4	.174E-01
96	51	2	20.9	-.575E-03	-.961	.231	18.5	.276E-01
96	51	3	24.1	-.349E-02	-1.82	.220	36.5	.194
96	5	0	-20.9	.245E-04	.134E-03	.929E-08	.919E-02	-.168E-02
96	5	1	-20.9	.475E-03	1.06	-.232	-7.17	-.198E-01
96	5	2	-20.9	.575E-03	.961	-.231	-13.7	-.305E-01
96	5	3	-24.1	.349E-02	1.82	-.220	-27.5	-.212
97	5	0	20.8	-.238E-04	-.130E-03	-.929E-08	-.919E-02	.168E-02
97	5	1	20.8	-.482E-03	-1.27	.232	7.17	.198E-01
97	5	2	20.8	-.486E-03	-1.18	.231	13.7	.312E-01
97	5	3	23.9	-.344E-02	-2.25	.220	27.5	.212
97	52	0	-20.8	.238E-04	.130E-03	.929E-08	.984E-02	-.180E-02
97	52	1	-20.8	.482E-03	1.27	-.232	-.801	-.222E-01
97	52	2	-20.8	.486E-03	1.18	-.231	-7.78	-.336E-01
97	52	3	-23.9	.344E-02	2.25	-.220	-16.2	-.229
98	7	0	13.3	.134E-02	.282E-02	-.366E-08	-.128E-01	.584E-02
98	7	1	13.3	.185E-02	-.152E-01	-.920E-01	-13.8	.332E-01
98	7	2	13.3	.252E-02	-.354	-.193	-3.63	.501E-01
98	7	3	15.3	.899E-02	.999	-.378	-24.9	.324
98	53	0	-13.3	-.134E-02	-.282E-02	.366E-08	-.154E-01	.753E-02
98	53	1	-13.3	-.185E-02	.152E-01	.920E-01	14.0	-.147E-01
98	53	2	-13.3	-.252E-02	.354	.193	7.17	-.249E-01
98	53	3	-15.3	-.899E-02	-.999	.378	14.9	-.234

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Reaction Forces

Node	LC	FX	FY	FZ	MX	MY	MZ
1	0	.3429E-04	21.58	-.1616E-03	-.1888E-14	-.9294E-08	-.1147E-14
1	1	.3910E-03	21.56	1.268	.7269E-06	.1315	-.4619E-03
1	2	.5890E-03	21.54	1.374	.8356E-06	.1307	-.5278E-03
1	3	.3574E-02	25.75	2.548	-.2683E-06	.1190	-.1008E-02
36	0	4.682	-5.364	2.703	.0000	.0000	.0000
36	1	5.174	-5.894	3.001	.0000	.0000	.0000
36	2	4.159	-4.511	2.447	.0000	.0000	.0000
36	3	5.308	-5.576	3.158	.0000	.0000	.0000
37	0	-4.682	-5.363	2.703	.0000	.0000	.0000
37	1	-5.172	-5.893	3.006	.0000	.0000	.0000
37	2	-4.172	-4.510	2.425	.0000	.0000	.0000
37	3	-5.422	-5.696	3.163	.0000	.0000	.0000
38	0	-.2932E-04	-5.365	-5.406	.0000	.0000	.0000
38	1	-.2388E-02	-4.284	-4.236	.0000	.0000	.0000
38	2	.1284E-01	-7.033	-6.534	.0000	.0000	.0000
38	3	.2708E-01	-3.796	-3.180	.0000	.0000	.0000

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Nodal Displacements

LC		X Node		Y Node		Z Node
0 < Trans		-.3406279E-03	30	-.2270622E-01	31	-.2016549E-03
0 < Rotat		-.3265019E-03	48	-.1220147E-05	30	-.2871185E-03
0 > Trans		.2838597E-03	29	.0000000	1	.4195973E-03
0 > Rotat		.2805137E-03	31	.9169870E-06	29	.2945988E-03
1 < Trans		-.1540053E-02	28	-.2680214E-01	28	-.8676689E-01
1 < Rotat		-.3484172E-02	2	-.5443899E-02	52	-.2963825E-03
1 > Trans		.1478389E-02	26	.0000000	1	.0000000
1 > Rotat		.1866126E-02	47	.2860640E-03	53	.3035325E-03
2 < Trans		-.3952396	33	-.9900131E-01	33	-.1012364
2 < Rotat		-.4008729E-02	2	-.1756572	33	-.8614046E-02
2 > Trans		.1015688	35	.0000000	1	.6860654
2 > Rotat		.1677512	33	.4342645E-01	35	.9409280E-01
3 < Trans		-.3734497	33	-.1149473	33	-.2238995
3 < Rotat		-.8414739E-02	2	-.1756775	33	-.8862455E-02
3 > Trans		.1161137	35	.0000000	1	.6174169
3 > Rotat		.1784179	33	.4759548E-01	35	.9971455E-01

LARSA STRUCTURAL ANALYSIS & DESIGN SYSTEM
LICENCEE = L & W ENGINEERING

09-03-90

HOUSATONIC CABLEVISION
140 FT. GUYED TOWER

FILENAME = F:\MONROE\MORO

ANALYSIS = Non-Linear/Stati

REPORT FOR Element Forces

LC		X	Memb	Node		Y	Memb	Node		Z	Memb	Node
0 < Force		-21.525	1	2		-3.5084	86	50	-.76094E-01	13	13	
0 < Momen		-.11572E-02	24	30		-.30698	12	13	-.68777E-01	12	12	
0 > Force		21.525	1	1		3.5084	86	11	.76094E-01	13	14	
0 > Momen		.11572E-02	24	48		.30702	12	12	6.8897	86	11	
1 < Force		-21.499	1	2		-3.6180	86	50	-1.3439	1	2	
1 < Momen		-1.2862	5	52		-22.547	3	4	-.68773E-01	12	12	
1 > Force		21.499	1	1		3.6180	86	11	1.3439	1	1	
1 > Momen		1.2862	5	6		22.547	4	4	7.1052	86	11	
2 < Force		-21.480	1	2		-4.6792	84	48	-3.2880	74	12	
2 < Momen		-4.7776	12	12		-27.066	3	4	-.23909	52	33	
2 > Force		21.480	1	1		4.6792	84	11	3.2880	74	44	
2 > Momen		4.7776	12	13		27.066	4	4	9.2047	84	11	
3 < Force		-25.617	1	2		-4.0450	84	48	-3.8835	70	7	
3 < Momen		-5.3231	12	12		-52.082	3	4	-.32501	6	7	
3 > Force		25.617	1	1		4.0450	84	11	3.8835	70	40	
3 > Momen		5.3231	12	13		52.082	4	4	7.9530	84	11	

L&W ENGINEERING CORP.

75 Second Street • Dumont, New Jersey 07628 • (201) 384-0500

November 6, 1990

Mr. Bob Sereday
HOUSATONIC CATV
2 East Street
New Milford, CN 06776

RE: MONROE HEAD END TOWER

Dear Mr. Sereday:

The necessary changes to the above referenced tower as described in our letter of September 17, 1990 are listed in detail below:

- 1) Section 83P between 20' & 40' needs to be upgraded to 83PX.
- 2) Section 83P between 40' & 60' needs to be upgraded to 83PX.
- 3) The 7/16" guy wires at the 134' elevation should be upgraded to 1/2" E.H.S.

Sample drawing of the 83P and 83PX are enclosed.

These three changes will upgrade the tower so it will accept all the proposed antennas and lines and still sustain it's 85MPH wind speed rating.

If you have any questions, please feel free to contact me at 201-384-0500.

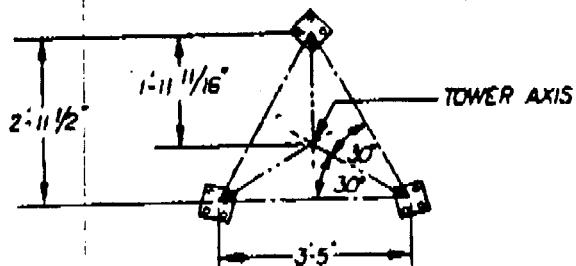
Very truly yours,
L&W ENGINEERING



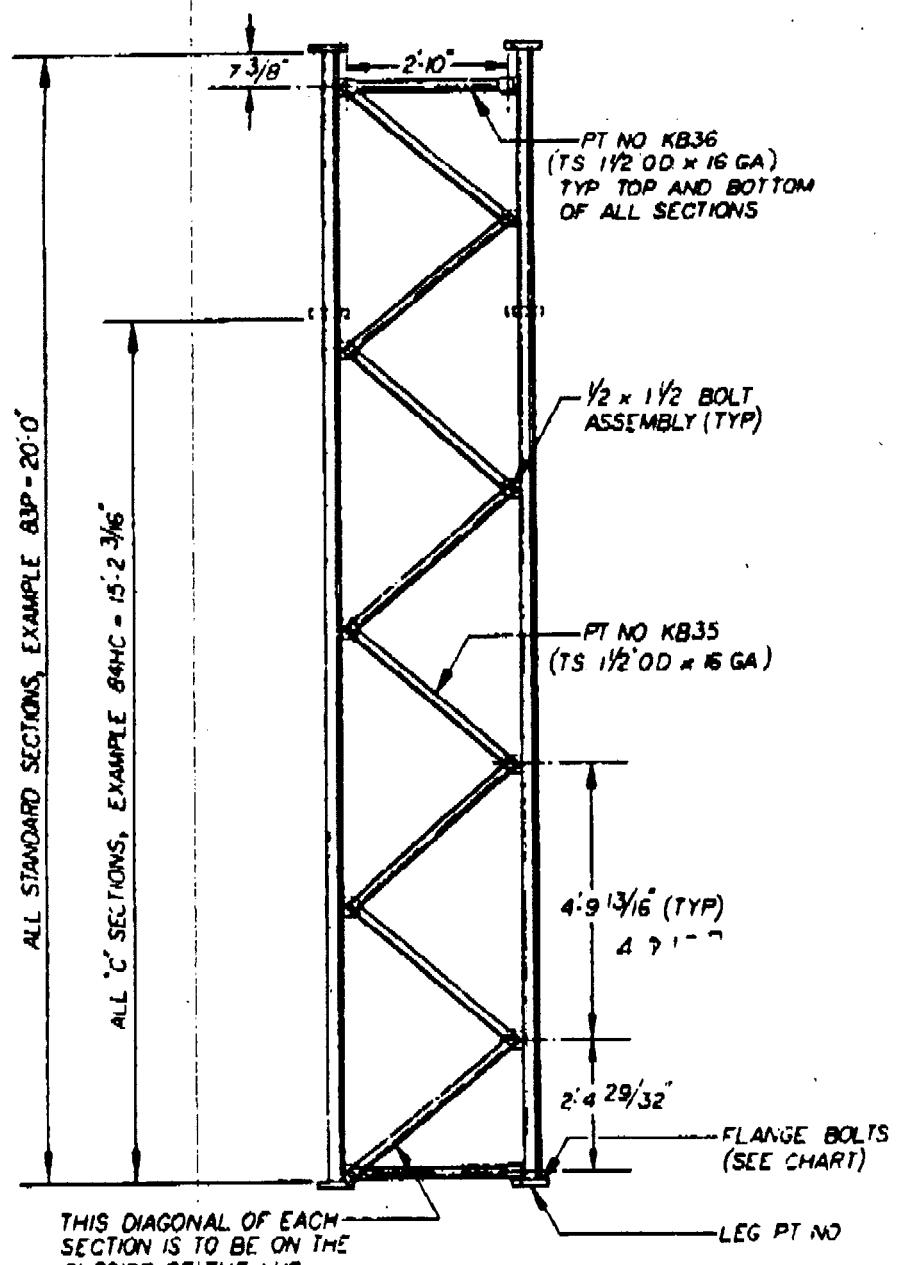
Wesley R. Weis

WRW/ja
SEREDAY1

Subject HOLLATONIC CABLE VISION 140' GUYED TOWER	Calc. No.	Rev. No.	Sheet No. 4 of 15
Originator KAY MOPAR	Date 8-27-90	Reviewed by	Date



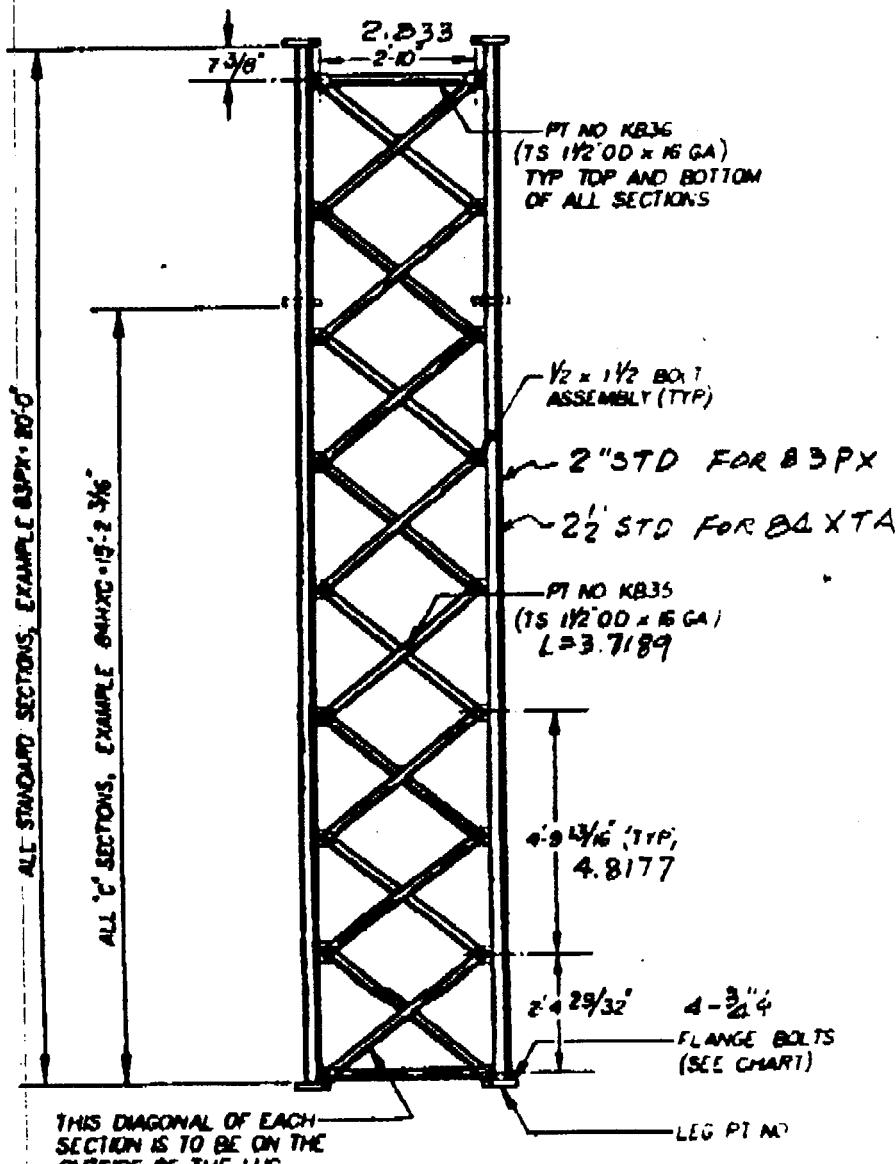
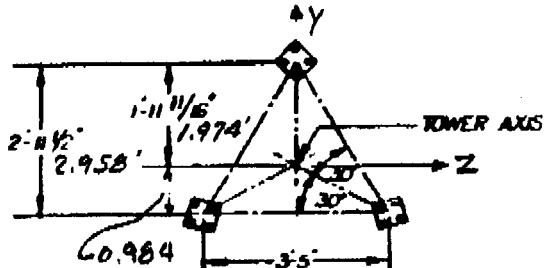
83 P



ELEVATION VIEW

Calculation Sheet

Subject Housatonic Cable Vision 140' Guyed Tower At Monroe	Calc. No.	Rev. No.	Sheet No. 6 of 15
Originator Date 8-27-90	Reviewed by		Date



HOUSATONIC CABLE VISION MONROE TOWER SITE

LONGITUDE 073-16-38
LATITUDE 41-20-33

GROUND ELEVATION 620'

METRO MOBILE CELLULAR HT.140'
DB809 W/6' SIDE ARM 11' ANT

EXISTING
AML 10' DISH WBQ-965
FREQ. 12,100.5-12,946.5MHz
AZ-343°, HT. 130'

METRO MOBILE CELLULAR HT.102'
DB809 W/6' SIDE ARM 11' ANT.

HARTFORD, CT UHF 8' DISH
CH. WVIT-30, WTIC-61, WTXX-20
AZ-42°, HT. 90' WHCT-18

NEW HAVEN, CT CH. WTNH-8,
AZ-71°, HT. 73'

HARTFORD, CT CH. WFSB-3
AZ-38°, HT. 65'

BRIDGEPORT, CT CH. WEDW-49
AZ-132°, HT. 55'

EXISTING 20' ANT. KNCF530
HOUSATONIC CABLE VISION
2WAY RADIO T-464.625,R469.625MHz

140' TOWER
1" - 20"

DATE: 11-6-90

If you should have any questions concerning this letter, please contact David McKeegan of the Waste Engineering and Enforcement Division/Solid Waste Section at 566-5847.

Sincerely,



David A. Nash

Director

Waste Engineering & Enforcement Division
WASTE MANAGEMENT BUREAU

DAN:DM:mdg

cc: Town of Monroe

**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



October 10, 1990

Mr. David S. Malko
Metro Mobile
50 Rockland Road
South Norwalk, CT 06854

Dear Mr. Malko:

The Waste Engineering and Enforcement Division/Solid Waste Section of the Waste Management Bureau has received a proposal from Metro Mobile CTS of Fairfield County, Inc. Metro Mobile proposes the installation of cellular antennas and related equipment on an existing Housatonic Cable Vision Company CATV tower facility on the closed municipal solid waste disposal area located on Guinea Road in the Town of Monroe.

The Metro Mobile plan also proposes the construction of an equipment shelter on the landfill surface. Engineering plans indicate the equipment facility will be placed on an asphalt pad above a gravel layer on top of the existing landform.

The Department approves the proposal submitted by Metro Mobile CTS of Fairfield County, Inc. subject to the following conditions:

1. Prior to commencing any construction activities at the Guinea Road site, the Waste Engineering and Enforcement Division/Solid Waste Section shall be notified in writing.
2. During construction of the asphalt pad and equipment facility, precautions shall be taken to ensure that there is no disruption or damage to the existing final capping material on the landfill. Violations of the landfill cap (vehicle damage, etc.) shall be immediately repaired with proper cover materials (>20% fines) and seeded.
3. Construction of the asphalt pad and the equipment facility shall be as depicted in the engineering plans submitted in the August 17, 1990 Metro Mobile proposal to the Waste Engineering and Enforcement Division, any variation from these plans will need to be approved by Departmental staff.
4. Adequate steps shall be taken during and after construction activities to restrict access to the site to appropriate personnel.

Additionally, adequate steps for preventing and monitoring any possible landfill decomposition gas migration within the proposed equipment facility should be evaluated by Metro Mobile or their design engineers.