



COPY

Resolution No. 2000-844

A RESOLUTION AUTHORIZING THE CITY MANAGER TO COMPLETE A LETTER OF AGREEMENT WITH TCI OF TUALATIN VALLEY d/b/a AT&T CABLE SERVICES

WHEREAS, the City of Sherwood chooses not to continue using the Metropolitan Area Communications Commission's (MACC) cable or network services, and

WHEREAS, the City chooses to enter into an agreement with TCI of Tualatin Valley d/b/a AT&T Cable Services for their cable and network service, and

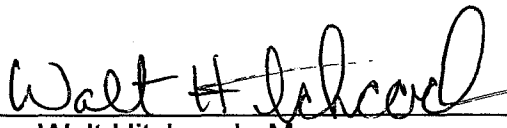
WHEREAS, City staff and representatives from AT&T Cable Services are currently in the process of developing a franchise agreement, and

WHEREAS, the City needs to enter into an interim agreement with AT&T Cable Services as soon as possible as the PCN network MACC provides will be shut off on January 15, 2000.

NOW, THEREFORE, THE CITY RESOLVES AS FOLLOWS:

The City Manager is hereby authorized to complete a Letter of Agreement with AT&T Cable Services (attached to this document as Exhibit A) which will be in effect from January 15, 2000, through June 30, 2000, or until a franchise agreement is completed, whichever is first.

Duly passed by the City Council this 11th day of January 2000.



Walt Hitchcock, Mayor

ATTEST:



C.L. Wiley, City Recorder

Resolution 2000-844
January 11, 2000
One page w/one Exhibit

**TCI OF Tualatin Valley, Inc.
d/b/a AT&T Cable Services
AGREEMENT
TO PROVIDE PRIVATE NETWORK
DATA SERVICES
TO
SHERWOOD PUBLIC LIBRARY**

CITY OF SHERWOOD

JANUARY 1, 2000 TO JUNE 30, 2000

1. Purpose

This Agreement is made this ____ day of _____, 2000, by and between TCI of Tualatin Valley, Inc., d/b/a AT&T Cable Services (hereinafter Company) and the City of Sherwood (hereinafter City) for the provision of telecommunication services over a private line network (hereinafter Network). Company is the owner and operator of the Network.

2. Background

During the term of this Agreement, Company may be upgrading the Network to the City's building from a "hybrid fiber-coaxial" system to an all-fiber Network. During this transition, the City's Network connection site may be converted to the new Network. If and when City's Network connection site is converted to the new Network, Company will provide City with premise fiber-to-Radio Frequency ("RF") interface equipment, in order that City can continue to utilize "legacy" RF connectivity equipment over the network. During the transition, Company will provide "mirrored" networks, with sections of the HFC Network and New Network operating concurrently, so that City's applications will operate continually over the network.

3. Term of Agreement

The Initial Term of the Agreement shall be from January 1, 2000 through June 30, 2000.

The Agreement may be renewed by mutual agreement of both Company and City and execution of a renewal contract or amending document.

4. Line of Demarcation

For Sites Served by the HFC Network

Company shall initially provide coaxial network cabling to a specified line of demarcation (“Demarc”) at each City premise. That Demarc shall consist of an RF connection within each premise of City, at which point Company shall connect the HFC Network to City’s RF connectivity equipment. All equipment and cabling from the Demarc to any equipment at City’s premise shall be the responsibility of City. See Connection and Operating Standards for Existing Network in Appendix B.

For Sites Served by the New Network

If, during the term of this Agreement, Company begins serving any or all City site(s) with the all-fiber, New Network, Company will provide optical fiber network cabling to a Company-owned-and-provided optical-to-RF conversion device at City Premise. The New Network Demarc at the premise shall consist of an RF connection on the City side of this conversion device, at which point Company shall connect the New Network to City’s RF connectivity equipment. All equipment and cabling from the Demarc to any equipment at City’s premise shall be the responsibility of City. See Connection and Operating Standards for New Network in Appendix C.

Company’s Headend

For any RF-based Network services (HFC or New Network), specialized network reference, frequency translation, and/or switching equipment shall reside at Company’s Headend (central network facility). Company shall provide and be responsible for such equipment at Company’s Headend.

5. Technical Requirements

Technical requirements and network availability standards are explained in Appendices “B” and “C” herein.

6. Construction Requirements

Company, when installing cable on the property of City, shall do so in a neat and professional workmanlike manner. Routing and location of optical and/or coaxial cables shall be mutually agreed upon between the parties.

7. **Signal Carriage**

City shall transmit and receive communications only on those frequencies enumerated in Appendix A, as designated by Company. Neither Company nor City shall permanently alter the assigned frequencies without the written consent of the other party.

8. **Customer Equipment upon City Premises**

At City site, City shall be responsible for all equipment on City side of the Demarc. *No equipment which will be used to transmit and/or receive signals on the Network shall be connected to the Network without prior written approval by Company*, approval shall not be unreasonably withheld. The execution of this Agreement shall constitute approval for equipment as indicated in Appendix A. City shall observe the technical requirements in Appendix B in the installation and operation of equipment and wiring connected to the Network from the Demarc.

Data Customers Only - Company shall consider City requests to utilize alternative, RF-based equipment, operating up to 40 Mbps on forward frequencies, provided that:

- (1) Company is convinced that such equipment does not jeopardize the integrity and reliability of the Network to any customer;
- (2) City agrees to purchase and be responsible for the maintenance of any and all premise and Headend equipment associated with the alternative, RF-based strategy;
- (3) The alternative equipment can be accommodated in the allotted frequencies for the City's application;
- (4) If there are other Public Agencies sharing the same pair of RF frequencies, they all agree to adopt the common new hardware, software, and configuration; and
- (5) Company and City sign a written agreement adopting the new RF equipment strategy to replace the "legacy" one in place on the frequencies they occupy.

9. **Customer Premise Wiring**

City shall be responsible for assuring that any internal RF wiring and connectors beyond the Demarc meet or exceed those specified in Appendix B.

10. **Rates**

- a. City shall pay Company rates for services as specified in Appendix A.
- b. Any rate decreases shall be passed through to City as they become effective.

11. **Payments**

a. **Monthly**

If City selects billing Option "A" in Appendix A, Company shall mail an invoice for one month's service to City no later than during the first full week of the calendar month in which service is to be provided. Pursuant to this monthly invoice rendered in advance by Company, City shall pay Company monthly. The monthly charge for fractions of a calendar month shall be computed at the rate of one-thirtieth (1/30) of a stated monthly rate for each day, or fraction of a day. The monthly charge shall be payable upon receipt; however interest charges shall not be assessed unless, after the fifth day of the calendar month after the service is provided, said invoice has not been paid. Payments after the fifth day of the calendar month after the service is provided shall be assessed an interest charge at an annual rate of current prime plus two (2%) percent, but not less than twelve percent (12%) APR for the time the payment is in arrears. Failure of the City to pay within sixty (60) days of receipt of an invoice shall constitute grounds for Company to terminate the Agreement.

b. **Annually**

If City selects payment Option "B" in Appendix A, thereby agreeing to pay for twelve consecutive months of service in advance, Company will provide a discount of five percent (5%) of the total amount due. Payment must be made not later than thirty (30) days after commencement of Appendix A term. This option is available only for agreements commencing on, or continuing from, the beginning of a fiscal year (July 1st).

12. Interruptions and Liquidated Damages

Existing Network - Prior to thirty (30) days subsequent to a Network Site becoming connected to the "New Network," the following availability standards shall be in effect:

For purposes of this availability standard, network problems shall not be defined as: infrequent scheduled preventive maintenance as long as Network customers are notified in advance. Network availability is subject to the Section 19 force majeure provisions herein and those conditions which are not within the reasonable control of the Company. These include, but are not limited to: damage resulting from conduct by a third party, natural disasters, civil disturbances, major non-Company owned telephone network outages, or severe and unusual weather conditions. Company will give affected Network users notice in the event of any of the foregoing occurrences.

Company agrees to the following liquidated damages for interruptions. In the event of interruptions of transmission on any circuit during City business hours not found to be beyond the reasonable control of Company, City shall be solely entitled to a reduction of \$5.00 per hour from the monthly lease fee for every hour of interruption of transmissions over two (2) hours during regular business hours (defined as 8:00 am to 5:00 p.m. Mondays through Fridays, except holidays) and six (6) hours after regular business hours. Said reduction shall appear on the subsequent month's invoice. No reduction shall be provided for interruptions of two (2) hours or less. Total reductions in any single month shall not exceed the total monthly lease charge. The interruptions of transmission are considered different if they are separated by no less than thirty (30) minutes of continuous transmission capability.

When Company anticipates transmission interruptions due to preventive maintenance or line extension procedures seven (7) or more days in advance, Company shall notify City of such predicted interruptions at least seven (7) days in advance. In cases when Company anticipates such interruptions less

than seven (7) days in advance, Company shall notify City as soon as possible, and at least twenty-four (24) hours in advance of the interruptions. Such interruptions shall be kept to a minimum and performed between 9:00 PM and 8:00 AM whenever possible.

"New Network" – Thirty (30) days after a Site becomes connected and activated

on the “New Network,” the following availability standards shall be in effect:

Network Availability - For each user on the network, network availability shall be equal to or better than 99.965% (no more than 184 minutes of network downtime per user) as measured on an annual basis.

The network shall be defined as ‘unavailable’ for any given City site when such site:

- a. Cannot, because of a network problem, measured by SNMP software or other appropriate software and associated hardware, or through a failure of a Company-provided interconnect, transmit video, voice and/or data communications to, from, and/or on the network, for which such user is paying a fee to Company.

Such problems shall be the result of a failure of one or more of the following:

- 1) The fiber optic cabling, connections and transmission equipment on the network;
 - 2) The optical to RF conversion equipment at Company’s headend;
 - 3) The optical to RF conversion equipment at the City’s premise (if such equipment is provided by Company);
 - 4) Network powering systems;
 - 5) The network equipment, connections and cabling, network management, hardware and software, and related equipment provided by Company at Company’s headend; and/or
 - 6) Any other Company-provided network component; and/or,
- b. Experiences, due to a network problem, video, voice, and data transmissions that are below the standards set forth in Appendix B, herein; and/or,
 - c. Experiences due to a network problem a data communications packet loss of greater than ten (10) percent.

Liquidated Damages - New standards for liquidated damages will go into effect for each customer Site thirty (30) days after that Site begins operating on the all-fiber “New Network.”

The network shall be defined as “unavailable” for any given user when such user:

- A. Cannot, because of a network problem, measured by SNMP software or other appropriate software and associated hardware, or through a failure of a Company-provided interconnect, transmit video, voice and/or data communications to, from, and/or on the network, for which such user is paying a fee to Company.

Such problems shall be the result of a failure of one or more of the following: 1) the fiber optic cabling, connections and transmission equipment on the network; 2) the optical to RF conversion equipment at Company's headend; 3) the optical to RF conversion equipment at the customer's premise (if such equipment is provided by Company); 4) network powering systems; 5) the network equipment, connections and cabling, network management, hardware and software, and related equipment provided by Company at Company's headend; and/or 6) any other Company-provided network component; and/or,

- B. Experiences, due to a network problem, video, voice, and data transmissions that are below the standards set forth in Appendix B, herein; and/or,
- C. Experiences due to a network problem a data communications packet loss of greater than ten (10) percent.

For purposes of this availability standard, network problems shall not be defined as: infrequent scheduled preventative maintenance as long as Network customers are notified well in advance. Except as otherwise provided for herein, network availability is subject to those conditions which are not within the control of the Company. These include, but are not limited to: damage resulting from conduct by a third party, natural disasters, civil disturbances, major non-Company owned telephone network outages, or severe and unusual weather conditions. Company shall comply with the requirements of "Demand Maintenance/Service and Repair" (Section 8 herein) to restore service following any of these occurrences. Company will give City notice in the event of any of the foregoing occurrences.

Signal Level Variation - The worst-case signal level variation (peak to valley) shall be better than or equal to $N / 10 + 2$ (where "N" equals the number of RF amplifiers in cascade from the node).

RF Signal Level at the Institution - The RF signal level on any channel delivered to the designated demarcation point at each Network user location shall meet or be better than 10 dBmV and shall, in all cases, enable operation within the manufacturer's minimum specifications of all Network transmission and reception equipment located within a facility connected to the Network.

13. Trouble Calls and Maintenance

Demand Maintenance/Service and Repair - Response to network problems shall occur at all hours (24 x 365). If Company is to provide maintenance/service or repair on network facilities located within City premises, Company must have reasonable access to such facilities on a 24/365 basis. This shall include response to all situations creating problems on the network, regardless of whether they originate within the network or within equipment or software at the user site. Appropriate Company technical support shall respond and actively begin working on network problems within 30 minutes of either 1) Company identifying such problem or 2) Company receiving a call from City reporting a network problem. Company shall work continuously until the problem is resolved. If it is determined by Company that the network problem is caused by user equipment or software, then City shall correct the problem such that other Network users are no longer affected. If City does not correct the problem, then Company may disconnect the affected City site from the Network until such time that the user equipment or software is repaired. If City desires assistance from Company in correcting the equipment or software problem, then Company shall provide such assistance, but Company shall also have the right to invoice City, at Company's prevailing hourly rate for the time spent correcting City equipment or software problems.

14. Confidentiality

All City data, voice, or video transmission using Company Network facilities shall be treated as confidential information. Company agrees that this information shall not be made available, in any form, to any party other than Company or its agents or contractors as may be necessary to conduct maintenance or repair activity, without written permission, in every instance, of City.

15. Content Control and Privacy

City shall have full and complete control of, and responsibility and liability for, the content of any and all communications transmissions sent or received using the leased facilities. In addition, City shall not intentionally utilize Network frequencies other than those assigned to City (see Appendix A), in order to receive, record, or re-transmit information that is present on the Network, without prior written consent from the party that is transmitting such information, and from Company to utilize those frequencies.

16. Access to City Premises

City shall, in accordance with its visitor control procedure, provide Company, their agents, representatives, or employees, ingress and egress to City's premises for purposes of system performance tests, maintenance, repairs and equipment replacement or change-outs.

17. **Assignment**

Either party may assign this Agreement upon prior written consent of the other party. Such consent shall not be unreasonably withheld.

18. **Damage**

Company shall be responsible for, restoring, or otherwise repairing to its prior condition any portion of the City's premises or facilities which are damaged by Company or its agents.

19. **Force Majeure**

Neither party hereto shall be deemed to be in default of any provision of the Agreement, for any failure in performance resulting from acts or events beyond the reasonable control of such party. For purposes of this Agreement, such acts shall include, but not be limited to, acts of nature, civil or military authority, civil disturbance, war, strikes, fires, other catastrophes or other force majeure events beyond the parties' reasonable control, provided however that the provisions of this paragraph and article shall not preclude City from canceling or terminating this Agreement as otherwise permitted hereunder, regardless of any force majeure event occurring to Company.

20. **Liability**

Each party shall be liable for any negligent acts or omissions committed by its agents or employees in performing this Agreement.

21. **Insurance - Aggregate Insurance for Network**

Company shall maintain, throughout the term of this Agreement, liability insurance insuring the Company, its officers, agents and employees, with regard to all claims, damages and penalties mentioned in Section 12 for Network, in the minimum amounts of:

\$1,000,000 for personal injury or death to any one person;
\$3,000,000 for personal injury or death resulting from any one accident;

\$ 500,000 for property damage resulting from any one accident; and
\$1,000,000 for all other types of liability.

22. Successors

Upon a permitted assignment, all rights and obligations of Company under this Agreement shall pass in total without modification to any successor regardless of the manner in which the succession may occur.

23. Non-Appropriation

Notwithstanding any other provisions of this Agreement, the parties hereby agree and understand that any obligation of City to obtain services as provided herein is subject to fund availability and appropriation by City for such services through its adoption of an annual budget. Should funds not be appropriated or be available from City during the term of this Agreement, the Agreement shall terminate and City shall pay Company any remaining pro-rata fees for services due to the date of such termination. When and if such funding is restored to City in order to procure the services indicated herein, or similar communications services, City shall provide Company an opportunity to provide the services indicated herein.

24. Non-Discrimination

Company shall not deny service, deny access, or otherwise discriminate against City on the basis of race, color, religion, national origin, sex or age. Company shall strictly adhere to the equal employment opportunity requirements of the federal government, as expressed in Section 76.13 (a) (8) and 76.311 of Chapter 1 of Title 47 of the Code of Federal Regulations, as now or hereafter constituted. Company shall comply at all times with all other applicable federal, state, or city laws, rules or regulations relating to non-discrimination.

25. Termination

This Agreement shall terminate 30 days following written notice by either party.

- a. In the event City terminates this Agreement based upon Company's default or failure to perform as described in this Agreement, Company shall reimburse to City the pro rata amounts paid on the unexpired rate year of this Agreement.

- b. If City terminates this Agreement for any reason other than that based on non-appropriation or on Company's default or failure to perform, Company shall be entitled to a penalty of 5% of the pro rata amount of the unexpired rate year of this Agreement.

26. Amendment

Any amendments to this Agreement shall be in writing and shall be signed by all parties.

27. Default

Each of the following events shall constitute a default:

1. Failure to perform or comply with any material obligation or condition of this Agreement by any party.
2. Failure to pay any sums due under this Agreement.
3. Any defaulting party shall have thirty (30) days in which to cure following written notice of default by the non-defaulting party.

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January 1, 2000 to June 30, 2000
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IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date
and year first above written.

TCI OF TUALATIN VALLEY, INC.
d/b/a AT&T Cable Services

By: _____

Title: _____

Date: _____

CITY OF SHERWOOD

By: _____

Title: _____

Date: _____

APPENDIX A

**CITY OF SHERWOOD
SERVICES AND RATES**

The following rates shall be applicable during the term of this agreement (January 1, 2000 through June 30, 2000).

High Speed Data Service

Service shall consist of bi-directional data communications, using Ethernet, between City's location and Company's Headend.

City shall operate LANcity Broadband Interface devices between 17.75 MHz and 23.75 MHz on the reverse side, and between 294.0 MHz and 300.0 MHz on the forward side (Channel "T9" to "W").

It is recognized by City that Company may assign additional use of these frequencies by other agencies, provided both Company and City agree that the additional equipment and applications would not be deleterious to communications by City.

City site operating LANcity device:

Sherwood Library
955 N. Sherwood Blvd
Sherwood, OR 97140

MONTHLY RATES

The monthly per-site charge to City for Service will be \$255.39.

**TOTAL MONTHLY RATE FOR HIGH SPEED DATA
SERVICES UTILIZING LANCITY DEVICES UPON
COMMENCEMENT OF AGREEMENT** **\$ 255.39**

OPTION "A" (PUBLIC AGENCY IS BILLED MONTHLY): **\$ 255.39**

**OPTION "B" * (PUBLIC AGENCY IS BILLED ONCE DURING
THE FIRST MONTH OF THE AGREEMENT FOR
COMPLETE TWELVE MONTHS: 5% DISCOUNT
APPLIED).... ANNUAL RATE: \$ 2,911.45**

**NOTE: ANY AMOUNT THAT CITY HAS ALREADY PAID COMPANY TOWARD A
FULL YEAR OF SERVICE, OR ANY AMOUNT THAT ANOTHER ENTITY HAS PAID
COMPANY ON ITS BEHALF, FOR A FULL YEAR OF NETWORK SERVICES OVER
THE WASHINGTON COUNTY INSTITUTIONAL NETWORK (PUBLIC
COMMUNICATIONS NETWORK) WILL BE CREDITED AGAINST CITY'S ACCOUNT.
ANY BALANCE DUE TO COMPANY WILL BE BILLED BY COMPANY AND
PAYABLE WITHIN 60 DAYS. ANY BALANCE OWED CITY BY COMPANY WILL BE
REFUNDED WITHIN 60 DAYS.**

REPRESENTATIVE OF CITY PLEASE CHECK AND SIGN PAYMENT OPTION
SELECTED:

OPTION "A" (Monthly Billings)

AUTHORIZING SIGNATURE _____

OPTION "B" (Annual, Advance Billing, with 5% Discount)

AUTHORIZING SIGNATURE _____

APPENDIX B

CONNECTION AND OPERATING STANDARDS FOR NETWORK CUSTOMERS

EXISTING NETWORK

Introduction

The following standards are intended to ensure optimum network performance for all public and nonprofit subscribers to the *existing* Network, which was in place on January 1, 2000. These standards will be observed by subscribers and their contractors in installing all new internal network interfaces, in modifying existing installs, and in operating equipment on the Network.

Current Network subscribers and new users with "pre-builds" are encouraged to bring their internal networks up to these standards. Company will provide consultations at no cost to any public or nonprofit agency on how to facilitate the construction of such internal networks, or how to achieve the standards in existing installations.

Network Description

The Network is a discrete, private line, broadband telecommunications system, linking the City's site with Company's Headend. The Network is operated and managed by Company.

During the term of the Agreement, Company will be in the process of upgrading the Network to an all-fiber optic network ("New Network"). During the contractual term, Company will provide some Network customers with the means to upgrade to the all-fiber New Network, with optical-to-electrical conversion occurring at each customer premise. This will allow those customers wishing to continue to utilize their existing "RF" based, cable modem technologies on the improved Network. For the current contractual period (from January 1, 2000 through June 30, 2000), there will be no increase in rates for these services. Prior to contractual terms commencing July 1, 2001, Company will provide Public Agencies with alternatives to upgrade to either the aforementioned, upgraded cable modem service, or to other technologies. Company will offer for consideration advanced, high-speed communications services on its fiber

optic infrastructure.

Standards and Procedures

In its operation of the network, Company will meet or exceed established technical standards as follows:

A. Signal Requirements

1. Reverse Signals

The reverse channels must be capable of providing return signals from any subscriber tap on the Network to any other tap on the Network without noticeable signal degradation or interference.

a. Capability - Network must be capable of carrying audio, color and black-and-white video, and low and high-speed data (analog or digital), according to the above criterion.

b. Maximum Customer Output Level Requirement - No more than 54 dBmV at video RF reference output level is required out of any customer communications device.

2. Level Standards and Pilot Carrier

Provision of a +15dbmv (+or- 2dbmv) video reference on pilot carrier 301.2625 at the line of demarcation at each Network user site. Company will frequently check the signal levels at user locations.

The following are the level standards that will be followed for all public and nonprofit facilities on the Network. These levels establish the requisite level that Company will provide for downstream signal and the requisite level that a public facility must provide when transmitting upstream. The standards should be referenced to video carrier levels.

a. DOWNSTREAM LEVELS

Levels provided at the drop or first outlet in the downstream direction:
(1) RSN Downstream Level (50-450 MHz)
Channel 2 through Channel WW, +15.0 dBmV
referenced to video. Data
carrier levels may vary, depend-
ing on user-specific hardware.

(2) Network Downstream Level (210.00-330.25 MHz)
Channel 12 through Channel EE, +15.0 dBmV
referenced to video.

- b. UPSTREAM LEVELS
Levels provided at the first active service, e.g. trunk amplifier on the Network:
- (1) Network Upstream level (5.75-132.00 MHz)
Channel T-7 through 132.00 MHz, +20.0 dBmV
referenced to video.

B. Maintenance and Repair Requirements

1. Repair Force

Company provides a repair force of technicians capable of responding properly to all requests for service by Network users.

2. Repair Response Times

Response to network problems shall occur at all hours (24 x 365). This shall include response to all situations creating problems on the network, regardless of whether they originate within the network or within equipment or software at the user site. Appropriate Company technical support shall respond and actively begin working on network problems within 30 minutes of either 1) Company identifying such problem or 2) Company receiving a call from City reporting a network problem. Company shall work continuously until the problem is resolved. If it is determined that the network problem is caused by user equipment or software, then City shall correct the problem such that other Network users are no longer affected. If City does not correct the problem, then Company may disconnect the affected City site from the Network until such time that the user equipment or software is repaired. If City desires assistance from Company in correcting the equipment or software problem, then Company may provide such assistance, but Company shall also have the right to invoice City, at Company's prevailing hourly rate for the time spent correcting City equipment or software problems.

3. Service Calls

All service calls should be made directly to Company, when possible, by the user agency's key service contact person.

C. User Connection Requirements

1. Materials and Local Network Configuration

Prior to constructing an internal "local area network" within a Network user site, the user or contractor will contact Company and provide them with a copy/drawings of their plans and specifications of the devices and materials used in distributing Network signals through the facility. This will allow Company to advise the network user on materials and equipment that will most suitably interface with the cable system, while meeting the user's needs.

The following are agreed to be acceptable materials for use in broadband coaxial local area networks that interface with the Network. In order to maintain compatibility, City will consult with Company when considering interfacing equipment other than those components listed in the examples below.

Company can refer network users to other agencies which can recommend the work of reputable broadband local area network companies.

a. Broadband Coaxial Cable:

Minimum 0.500" CATV Coaxial Cable "Hardline"; Drop Cable: RG-6 Quad Shield; Nat'l. Electrical Code rated "CATV" or better.

All cable is to have a minimum 30 dB structural return loss from 5 to 350 MHz.

b. Amplifiers, Pads, and Equalizers:

Need to meet minimum bandwidth requirements of the Network (5 to 132 MHz and 186 to 350 MHz).

Not more than 2 dB peak to valley response.

Rf-gasketed or sealed, and should emit not more than 20 uV/M radiation levels of any rf signals at 3 meters.

Examples of Acceptable Equipment:
C-COR LAN 101 Distribution Amplifiers, ac powered (compatible with amplifiers on the Network itself).

C-COR Pads and Equalizers.

- c. Taps/Drops:
Each Unused Port Terminated in 75 Ohm Resistor.
End-of-Line Terminators at 75 Ohms.
5 to 350 MHz bandpass.
Must have integral gasketing or sealing; shall not emit more than 20 uV/M radiation levels of any rf signals at 3 meters.
- d. FCC Specifications:
Upon internal network construction and activation, network shall not radiate levels greater than 20 uV/M at 3 meters, as per FCC Rules, Part 76.
- e. Connectors:
"Hardline Section" - On internal "trunk" (hardline) coaxial cable, use only PIN-type, integral sleeve, aluminum connectors.

Network Service Drops - F-connector should be a one-piece, integral sleeve, with crimp-sleeve specification matched to the cable's diameter.
- f. Other Considerations:
Company recommends that the user should procure at least a 1-year warranty on parts and labor on LAN equipment, and complete documentation on cable routing, footages, tap locations and values, and drop locations (referenced to "as-built" drawings).

- D. Equipment Additions/Deletions/Changes in Location or Frequency
Prior to adding, deleting, or moving communications devices on the Network, or to

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January 1, 2000 to June 30, 2000
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changing frequencies, the network user will notify Company with a Service Change Notification Form. Any change in equipment or location is subject to the approval of Company.

APPENDIX C

CONNECTION AND OPERATING STANDARDS FOR NETWORK CUSTOMERS

“NEW NETWORK”

Introduction

The following standards are intended to ensure optimum network performance for all Sites on the *New Network*, and to which some customers will be transitioned during the term of the Agreement. These standards will be observed by subscribers and their contractors in installing all new internal network interfaces, in modifying existing installs, and in operating equipment on the Network.

SIGNAL QUALITY

The network shall achieve the performance standards listed below under worst-case conditions for communications occurring between each Network institution and Company's headend, since all communications will be regenerated at the headend.

Noise and Distortion Performance - Under worst-case channel loading (including both analog and digital signals), the combined upstream and downstream performance of the system shall meet or exceed the following:

- Carrier to noise equals 45 dB or better
- Carrier to composite triple beat equals -55 dB or better
- Carrier to second order distortion equals -58 dB or better
- Carrier to cross modulation equals -54 dB or better

Data Communications - For any data communications link on the network, the bit error ratio (BER) shall be equal to or better than 1×10^{-9} , provided customer premise equipment meets or exceeds, and is operating to these specifications.

Network Availability - For each user on the network, network availability shall be equal to or better than 99.965% (no more than 184 minutes of network downtime per user) as measured on an annual basis.

The network shall be defined as 'unavailable' under the standards in Attachment 11.2 A for any given user when such user:

- A. Cannot, because of a network problem, measured by SNMP software or other appropriate software and associated hardware, or through a failure of a Company-provided interconnect, transmit video, voice and/or data communications to, from, and/or on the network, for which such user is paying a fee to Company.

Such problems shall be the result of a failure of one or more of the following: 1) the fiber optic cabling, connections and transmission equipment on the network; 2) the optical to RF conversion equipment at Company's headend; 3) the optical to RF conversion equipment at the customer's premise (if such equipment is provided by Company); 4) network powering systems; 5) the network equipment, connections and cabling, network management, hardware and software, and related equipment provided by Company at Company's headend; and/or 6) any other Company-provided network component; and/or,

- B. Experiences, due to a network problem, video, voice, and data transmissions that are below the standards set forth in Attachment 11.2 A; and/or,
- C. Experiences due to a network problem a data communications packet loss of greater than ten (10) percent.

For purposes of this availability standard, network problems shall not be defined as: infrequent scheduled preventative maintenance as long as Network customers are notified well in advance. Except as otherwise provided for herein, network availability is subject to those conditions which are not within the control of the Company. These include, but are not limited to: damage resulting from conduct by a third party, natural disasters, civil disturbances, major non-Company owned telephone network outages, or severe and unusual weather conditions. Company shall comply with the requirements of "Demand Maintenance/Service and Repair" to restore service following any of these occurrences. Company will give affected Network users notice in the event of any of the foregoing occurrences.

Signal Level Variation - The worst-case signal level variation (peak to valley) shall be better than or equal to $N / 10 + 2$ (where "N" equals the number of RF amplifiers in cascade from the node).

RF Signal Level at the Institution - The RF signal level on any channel delivered to the designated demarcation point at each Network user location shall meet or be better than 10 dBmV and shall, in all cases, enable operation within the manufacturer's minimum

specifications of all Network transmission and reception equipment located within a facility connected to the Network.

SERVICE RESPONSE

Network Maintenance - Company shall be responsible for the ongoing maintenance and performance of the Network from the demarcation point within a facility through the network, including the Network headend. The demarcation point shall be that point, designated by a Network site agreement, where the Network connects to internal wiring and/or equipment within the facility unless such wiring or equipment has been supplied or is maintained by Company, in which case the Company shall be responsible for Network performance to the point of connection to facility owner supplied wiring or equipment. Routine and preventive maintenance shall be performed continually on the network to ensure that it meets all performance criteria detailed herein. Network users shall have at least ten (10) business days advance notice of routine and preventative maintenance activities that may affect operation of their Network circuits.

Demand Maintenance/Service and Repair - Response to network problems shall occur at all hours (24 x 365). This shall include response to all situations creating problems on the network, regardless of whether they originate within the network or within equipment or software at the user site. Appropriate Company technical support shall respond and actively begin working on network problems within 30 minutes of either 1) Company identifying such problem or 2) Company receiving a call from a Network user reporting a network problem. Company shall work continuously until the problem is resolved. If it is determined that the network problem is caused by user equipment or software, then the user shall correct the problem such that other Network users are no longer affected. If the user does not correct the problem, then Company may disconnect the affected user site from the Network until such time that the user equipment or software is repaired. If the user desires assistance from Company in correcting the equipment or software problem, then Company shall provide such assistance, but Company shall also have the right to invoice the user, at Company's prevailing hourly rate for the time spent correcting user equipment or software problems.

Network Support - Company shall provide an appropriate complement of administrative, headend and field personnel at all times to meet the performance criteria detailed herein.
Service Call Processing and Tracking - Company will establish mechanisms and procedures for all Network users to quickly and easily report system problems. All trouble or service calls will be documented, processed and completed in an expedient manner.

NETWORK SERVICE PENALTIES AND PROCEDURES

(Note: These penalties will apply beginning thirty (30) days from the date any user begins service on the upgraded Network. Until that time, current Network user contract penalties will apply.)

Network Outages - Network outages are defined in Network Service & Performance Standards, Attachment 11.2 A , Network Availability. Each minute of each network outage shall be counted against the 184 minutes per site, per contract year, allowed under the above Standards.

Claims for a network outage credit will be subject to the following schedule:
There will be no credits for outages for the first 184 cumulative minutes for each Network site in a single contract year. Credits will apply for each month of the contract year, beginning with the month in which the total of 184 outage minutes is reached. For each outage minute, or fraction thereof, during a single month, the network outage credit shall be two percent (2%) of the monthly rate, and shall increase by two percent (2%) for each additional minute, or fraction thereof. The maximum monthly outage credit for each Network site shall not exceed 100% of the monthly rate.

OUTAGES FOR EACH NETWORK SITE EXCEEDING 184 CUMULATIVE MINUTES DURING A SINGLE CONTRACT YEAR:

<u>Cumulative Duration of Network Outages</u> <u>During a Single Month</u> (measured in minutes)	<u>Credit Towards Monthly Rate</u>
0.1 – 1.0	2%
1.1 – 2.0	4%
2.1 – 3.0	6%
↓	↓
	49.1 and above 100%

Written claims for outage credit. Network users must provide Company with a written claim for outage credit within seven (7) business days of the event that caused the outage. The following information must be filed by the Network user's designated contract representative and the claim must include the following information:

- 1) Organization's name and contact information
- 2) Name of user contract representative

- 3) Date and beginning/end time of claimed outage
- 4) Site address(es) where outage(s) occurred
- 5) Description of outage event.

Claim Process: Network users must submit the required information by USPO mail to:

AT&T Cable Services
3500 SW Bond Ave.
Portland, Oregon 97201

Company will acknowledge all claims within two business days of receipt of claim and will review all claims within ten (10) business days of receipt.

Company shall inform Network user in writing whether the appropriate service credit claim will be granted or rejected. If rejected, the notification will specify the basis for the rejection. If Company fails to respond to properly made claim within fifteen (15) days of receipt of claim, claim is deemed to be accepted by Company and appropriate service credits will be due.

Credit Process: Company will issue service credits in the form of deductions applied towards the Network user's next applicable contract period service rate.