

7A

**CITY OF BETHLEHEM**  
**INTER-DEPARTMENTAL CORRESPONDENCE**

**SUBJECT:** Tower Lease Agreement  
Lessee Name: TTM Operating Corporation, Inc.  
Location: Tower on University Avenue in South Mountain Park

**TO:** Cynthia Biedenkopf, City Clerk

**FROM:** John F. Spirk, Jr., Esq., City Solicitor

**DATE:** July 3, 2008

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Attached is a proposed Tower Lease Agreement.

Also attached is a resolution for Council's consideration.

Please place this matter on City Council's agenda for review and appropriate action.

JFS,JR:csb

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Copies To: J. B. Callahan  
M. Alkhal  
M. Wagner  
P. Sikora, Velocitel (for TTM Operating Corp.)

By: John F Spirk, Jr.

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RESOLUTION NO. \_\_\_\_\_

Authorization For Tower Lease Agreement

BE IT RESOLVED by the Council of the City of Bethlehem that the Mayor and the Controller and/or such other City officials as deemed appropriate by the City Solicitor, are hereby authorized to the Tower Lease Agreement between the City of Bethlehem and TTM Operating Corporation, Inc., and such other agreements and documents as are deemed by the City Solicitor to be necessary and/or related thereto, according to the terms and conditions indicated therein and made a part hereof, for the purpose of installing and/or operating radio communications equipment on the tower located in South Mountain Park on South Mountain Drive.

Sponsored by \_\_\_\_\_

\_\_\_\_\_

ADOPTED by Council this            day of            , 2008.

\_\_\_\_\_  
President of Council

ATTEST:

\_\_\_\_\_  
City Clerk

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CITY OF BETHLEHEM  
TOWER LEASE AGREEMENT

This Tower Lease Agreement (Agreement) is made on this \_\_\_\_\_ day of \_\_\_\_\_, 2008, by and between the CITY OF BETHLEHEM, doing business at 10 East Church Street, Bethlehem, Pennsylvania, 18018 (hereinafter referred to as "Lessor")

AND

TTM OPERATING CORPORATION, INC., a Nevada corporation, located at 146 North Canal Street, Suite 210, Seattle, WA 98103 (hereinafter referred to as "Lessee") is hereby effective in accordance with the following terms:

1. Demised Premises - The Lessor owns certain real property located in South Mountain Park on University Avenue in Lower Saucon Township, Northampton County, Pennsylvania as more fully described on Exhibit A attached hereto and incorporated herein by reference, on which real property, Lessor owns a building "(the Building)" and operates a 175 foot radio tower (Tower) located at Latitude 40.5950 and Longitude 75.376390. Lessor hereby grants permission to Lessee to install and/or operate the radio communications equipment as described in Exhibit B attached hereto and incorporated herein by reference where indicated on the Tower in Exhibit B and installed in the Building in the shaded area set forth in Exhibit C, said portions of the Tower and the Building hereinafter referred to as the "Demised Premises". There shall be a bridge between the Tower and the Building for the purpose of installing the equipment set forth in Exhibit B. Lessor shall make reasonable modifications to the interior of the Building at Lessee's request for security purposes. Such modifications may include erection of partitions, moving of heating and air conditioning ducts, and special security provisions. The cost of any such modifications shall be borne by Lessee. Lessor shall be provided with twenty-four (24) hour access to any secured area within the Building, but shall use such access for emergency or security purposes only.

2. Electricity and Utilities - Lessor shall provide access to electric power for the Lessee's communication equipment. The cost of such electric power shall be to the Lessee's account. The Lessee shall provide for metering and all service to Lessee's equipment. All such electrical work shall be coordinated and acceptable to the Electrical Bureau, Department of Public Works and approved by the City Electrical Inspector. Lessee shall have the right to connect to any existing utilities on the Property or obtain separate utility service from any utility company that will provide service to the Property, at Lessee's expense. Lessor agrees to sign such reasonable documents or easements as may be required by said utility companies to provide such service to the Demised Premises. Any easement necessary for such utilities will be at a location acceptable to Lessor and the servicing utility company. During periods of power failure, Lessee has the right to install and operate a temporary emergency power generator on the Property in a location mutually acceptable to Lessor and Lessee. Lessee agrees to remove the generator promptly upon restoration of power.

3. **Interference** - Lessee shall not install and/or operate any Communication Equipment and cables/lines between antennas and Communications Equipment which shall interfere with any other existing communications equipment or antennas. Lessor will not lease space on the Tower to any third party whose use of the space would interfere with Lessee's use, nor will Lessor allow an existing tenant to modify its installation or operations if such actions cause interference to Lessee. However, if Lessor modifies or adds to its own equipment located on the Tower and such modification or addition interferes with Lessee's equipment, or *vice versa*, Lessee shall modify its equipment to eliminate the interference within thirty (30) days of receipt of notice of interference. If such modification is not possible within said time frame, Lessor or Lessee may terminate this Agreement by written notice to the other party at which time Lessee will remove its equipment from the Demised Premises within twenty days (20) of receipt of such notice and the party's rights and obligations hereunder shall cease. All Communication Equipment shall be installed on the Tower and in the Building in accordance with good and accepted engineering practice.

4. **Ingress and Egress to Demised Premises** - Lessee shall have a non-exclusive right of reasonable ingress and egress, seven days a week, on a 24 hour basis, by foot or motor vehicle, including trucks, to the Demised Premises for the purposes of maintenance, installation and repairs to the Communications Equipment. It is agreed, however, that only authorized engineers or employees of Lessee, or persons under Lessee's direct supervision, will be permitted to enter the Demised Premises. Lessor will require the on duty city personnel to accompany the authorized employee of the Lessee. The following schedule will apply:

- A. During normal business hours Monday thru Friday excluding scheduled holidays from 8am-4pm at no charge.
- B. After normal Business hours, weekends and holidays, a charge of 1½ times the hourly rate and a minimum of four (4) hours will be charged.
- C. A minimum of two (2) hour advance notice shall be required. Lessee shall at all times provide said notification of any required ingress and egress to the Demised Premises by calling the City of Bethlehem Water Control room at 610-865-7077 and requesting the duty man.

5. **Term** - This Agreement shall commence on the earlier to occur of (i) start of installation of Lessee's Communications Equipment; or (ii) \_\_\_\_\_, and shall continue for an initial term (the "Original Term") of three (3) years as defined below. Thereafter, this Agreement shall continue in force and effect upon the terms and conditions contained herein for four (4) renewal terms of three (3) years each unless Lessee terminates this Agreement by providing written notice to Lessor at least ninety (90) days prior to the expiration of the Original Term or any renewal term. Lessor may terminate this agreement at the end of each term with (90) days notice.

6. **Rent** - (a) The Monthly Rent of the Original Term as shall be in the amount of Two Thousand Dollars and No Cents (\$2,000.00) to be paid monthly beginning on the date hereof. Monthly rental payments shall be due and payable in advance on the first of each month. Rental payments shall be sent to Lessor at the address set forth in Paragraph 20. Such monthly

installments shall be deemed late if not received by Lessor within ten (10) days of the first day of each month and shall bear interest at the rate of fifteen percent (15%) per annum thereafter until paid. Lessor shall notify Lessee in writing when the Lessee is (thirty) 30 days late in the payment of rent and should the Lessee not pay all monies due within ten (10) days of receipt of such notice, Lessor may declare this Agreement null-and-void and remove all Lessee's equipment in the Building and antennas on the Tower fifteen (15) days later. Any such removal of Lessee's equipment hereunder shall be at Lessee's expense.

(b) The Monthly Rent during each 3-year renewal term shall be equal to the rent paid for the previous term, increased by twelve percent (12%), and shall remain the same throughout each month of such renewal term.

7. Permitted Uses - Lessee shall use the Demised Premises for the purpose of installing and operating communication equipment for wireless voice and/or data transmission and microwave communication. The installation and operation of these facilities shall be conducted in accordance with the standards imposed by the Federal Communications Commission, and any other local, state or federal body with authority over such transmission and operation. All improvements shall be at Lessee's expense. Lessee shall use the Demised Premises for no other purpose without the prior written consent of Lessor.

8. Necessity of Permits; Right to Terminate - It is understood and agreed that Lessee's ability to use the Demised Premises and its obligation to pay rent are contingent upon its obtaining, after the execution date of this Agreement, all certificates, permits, licenses and other approvals that may be required by any federal, state or local authorities, including without limitation the Federal Communication Commission and the Federal Aviation Administration (the "Permits") to allow Lessee to use the Demised Premises for its intended purposes, as set forth herein, as well as an engineering tower analysis (the "Tower Study") which indicates that the Tower is capable of handling the wind loading created by the Communications Equipment to be installed on the Tower pursuant to the terms of this Agreement. Lessor shall cooperate with Lessee in its efforts to obtain any and all Permits, if requested, and shall take no action, which would adversely affect the status of the Demised Premises with respect to the intended use thereof by Lessee. Lessee is hereby given the right to survey, radio coverage test, and conduct other investigations needed to secure the Permits and Tower Study.

In the event that any of the Permits are not granted or issued, or are cancelled, or expire, lapse or are otherwise withdrawn or terminated (after Lessee's due diligence to maintain the same); or a Tower Study indicates that the Tower is not capable of handling the wind loading created by the Communications Equipment installed or to be installed on the Tower pursuant to this Agreement; or radio coverage tests determine that the Demised Premises will not be suitable for Lessee's coverage goals; or events subsequent to an initial radio coverage test cause the Demised Premises to be unsuitable to satisfy Lessee's coverage goals, Lessee shall have the right to terminate this Agreement upon sixty (60) days prior written notice to Lessor, during which period Lessee will continue to pay rent at the then-current rate. Upon such termination this Agreement shall become null and void and the parties shall have no further obligations to each other under the terms of this Agreement. In the event of such termination by Lessee, any prepaid rent shall be retained by

Lessor. If Lessee shall terminate for any other reason, Lessee shall give Lessor ninety (90) days notice in writing.

9. Removal of Lessee's Improvements Upon Termination - Lessor covenants and agrees that no part of the improvements constructed, erected or placed by Lessee on the Demised Premises shall become, or be considered as being affixed to or a part of, the Demised Premises, any and all provisions and principles of law to the contrary notwithstanding, it being the specific intention of Lessor that all improvements of every kind and nature constructed, erected or placed by Lessee on the Demised Premises shall be and remain the property of Lessee. Lessee may remove the improvements at any time during the term of the Agreement at its discretion, subject to the provisions contained in Paragraph 31 below. Further, Lessee, upon termination of this Agreement, shall, within 120 days, remove such improvements, including without limitation the Communications Equipment from the Demised Premises. The Demised Premises shall be returned to a condition that reasonably matches its original condition, reasonable wear and tear accepted. Lessee shall compensate Lessor on a pro rata basis for each day said improvements remain on the Demised Premises after termination of this Agreement, at the monthly rate at the time of termination, until such time as removal of the improvements is completed.

10. Maintenance of Communications Equipment - Lessee agrees that Lessee's Communications Equipment to be installed in or on the Demised Premises pursuant to this Agreement will be installed, maintained, inspected and tested pursuant to, and Lessee will generally comply with, all applicable rules and regulations of the Federal Communications Commission, the Federal Aviation Administration, all other Federal statutes and rules and all other applicable codes of the city, township, county and state concerned. Lessee and Lessor will accommodate each other as necessary to permit the maintenance of their respective communications equipment, which is on the Tower.

11. Maintenance of Demised Premises - Lessor shall maintain the Tower, including all required tower marking and lighting if required, shall maintain all required records and shall file any required notification concerning any failure of, repairs to, and correction of the Tower in compliance with the rules and regulations of the Federal Aviation Administration and the Federal Communications Commission, as applicable. Lessor shall maintain the Building in reasonable condition for the intended use by Lessee, including 24/7 climate control, and shall promptly repair any damage to the Demised Premises.

12. Interference With Intended Use - During the term of this Agreement, and any renewals hereof, Lessor will not enter into a similar lease with any other party if such grant would materially affect or interfere with Lessee's intended use of the Demised Premises. In the event of any material interference, Lessor shall take all steps necessary to immediately correct and eliminate the interference. During the Term of this Agreement, Lessee will not alter its Communications Equipment in any way, which will cause any material interference with the existing use of the Tower by Lessor or any other tenants of Lessor. In the event of any material interference, Lessee shall take all steps necessary to immediately correct and eliminate the interference.

13. Indemnification - Lessee agrees to indemnify and save Lessor harmless from and

against any and all liability, damage, expense, claims or judgments, including reasonable attorneys' fees resulting from injury to person or damage to property resulting from or arising out of the use and or occupancy of the Demised Premises by Lessee if caused by the negligent act or omission of Lessee, Lessee's agents, employees, invitees, or guests during the term of this Agreement. Lessee agrees to indemnify and save Lessor harmless from and against any and all liability, damage, expense, claims, or judgments arising from the use and maintenance of its equipment during the term of this Agreement.

14. Insurance - Lessee covenants and agrees that before the commencement of the Lease Agreement herein provided for, that Lessee is protected by, at minimum, the following types of insurance issued by insurance carriers having an A.M. Best rating of B+ or better:

- (a) Workmen's Compensation Insurance with statutory limits of liability;
- (b) Employer's Liability Insurance;
- (c) Public Liability Insurance, including contractual liability to insure, among other obligations, Lessee's indemnity obligation set forth in Article 14 hereof with limits of liability of \$1,000,000 combined single limit;
- (d) Automobile Liability Insurance with limits of liability of \$1,000,000 combined single limit;
- (e) Such other insurance, fire or other, as will indemnify and protect City and Lessee insofar as their respective interest may appear.

City of Bethlehem shall be named as an additional insured on public liability insurance contracts in effect during the lifetime of this Agreement, and none of such insurance contracts may be cancelled or materially altered except after thirty (30) days written notice by the insurer to City. Duly authenticated Certificates of Insurance evidencing the required insurance coverage shall be provided to and approved by the City Solicitor prior to the commencement of the Agreement.

15. Default of Lessee- If Lessee defaults in the payment of the rent herein agreed to be paid and such default is not cured within ten (10) days after receipt by Lessee of prior written notice of such default, Lessor may terminate this Agreement with thirty (30) days written notice to Lessee. If default is made in the performance of other covenant or agreement of Lessee herein contained and such default is not cured within thirty (30) days after receipt of written notice by Lessee of such default from Lessor, Lessor may terminate this Agreement upon thirty (30) days' written notice; provided, however, where any such default cannot reasonably be cured within thirty (30) days, Lessor may not terminate this Agreement if Lessee commences to cure such default within the thirty (30) day period and thereafter diligently pursues such cure to completion.

16. Fire or Other Unavoidable Casualty - In the event the Demised Premises or any part thereof shall at any time during the term of this Agreement or any renewal thereof be destroyed by fire or other casualty so as to be unfit for Lessee's occupancy and intended use hereunder and the Demised Premises cannot be restored or rebuilt by Lessor within 120 days, this Agreement shall, at the option of Lessee or Lessor, terminate and rent shall be abated for the unexpired portion of this Agreement, effective as of the date of such casualty. If the Demised Premises can be restored or

rebuilt within 120 days, Lessor shall, with due diligence, restore or rebuild the Demised Premises and the rent payable hereunder during the period in which the Demised Premises are untenable shall be adjusted equitably.

17. Sale of Demised Premises - Should Lessor, at any time during the term of this Agreement, sell all or any part of the Demised Premises, such sale shall be under and subject to this Agreement and Lessee's rights hereunder.

18. Remedies Cumulative - No remedy herein conferred upon or reserved to Lessor or to Lessee is intended to be exclusive of any other remedy herein or by law provided, but each shall be cumulative and shall be in addition to every other remedy given hereunder now or hereafter existing at law or in equity or by statute.

19. Assignment - No assignment of all or any part of this Agreement shall be valid without the prior written consent of Lessor, which shall not be unreasonably delayed, conditioned or withheld. Provided, however, that Lessee may assign its interest to its parent company, any subsidiary or affiliate of it or its parent company or to any successor-in-interest or entity acquiring fifty-one percent (51%) or more of its stock or assets, subject to any financing entity's interest, if any, in this Agreement. Lessor may assign this Agreement upon written notice to Lessee, subject to the assignee assuming all of Lessor's obligations herein.

20. Notices - Any written notice provided for herein shall be given in writing and shall be deemed validly given if delivered by personal delivery with proof of receipt, overnight air carrier service, or certified or registered United States mail, postage prepaid, return receipt requested, addressed as follows:

Lessor:	Name:	City of Bethlehem
	Attention:	Director of Public Works
	Address:	10 East Church Street Bethlehem, PA 18018
Lessee:	Name:	Telecom Transport Management, Inc.
	Attention:	Lease Administration
	Address:	146 North Canal Street, Suite 210 Seattle, WA 98103

Notice shall be deemed effective upon receipt. The person to whom and the place to which notices are to be delivered may be changed from time to time by either party by written notice given to the other party.

21. Governing Law - This Agreement and the performance thereof shall be governed, interpreted, construed, and regulated by the laws of the Commonwealth of Pennsylvania. The exclusive venue for all actions shall be Northampton County, Pennsylvania, only.

22. Attorneys' Fees - If Lessor or Lessee files a suit against the other which is in any

way connected with this Agreement, the unsuccessful party shall pay to the prevailing party its reasonable attorneys' fees incurred in connection with such, which sum shall be deemed to have accrued on the commencement of such action and shall be enforceable whether or not such action is prosecuted to judgment.

23. Entire Agreement; Amendment - This Agreement contains the entire agreement between the parties hereto and no verbal or oral agreements, promises or understandings shall be binding upon either Lessor or Lessee in any dispute, controversy or proceeding at law, and any addition, variation, or modification to this Agreement shall be void and ineffective unless made by a writing signed by Lessor and Lessee.

24. Headings - Paragraph headings of this Agreement are inserted only for reference and in no way define, limit, or describe the scope or intent of this Agreement nor affect its terms or provisions.

25. Successors and Assigns - This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns of the parties hereto.

26. Quiet Title - Lessor covenants and agrees that Lessee, upon paying the rent and performance of its covenants herein provided, shall peaceably and quietly have, hold, and enjoy the Demised Premises.

27. Authority to Enter into Agreement - Lessor covenants that Lessor is seized of good and sufficient title and interest to the Demised Premises and has full authority to enter into and execute this Agreement.

28. Changes in Law - In the event that there is a change in Federal law governing FCC licensing for towers under Health and Safety provisions which would materially affect the operation of Lessor's tower, either Lessor or Lessee may seek to re-negotiate the terms of the Agreement or at its election to terminate upon one hundred eighty (180) days notice to the other party.

29. Subordination and Non-Disturbance - This Agreement is subordinate to any mortgage on deed of trust now of record against the site.

30. Miscellaneous - If requested by Lessee, Lessor agrees promptly to execute and deliver to Lessee a recordable memorandum of this Agreement in the form of Exhibit D.

31. Waiver of Lessor's Lien - Lessor waives any lien rights it may have concerning the Communications Equipment which is deemed Lessee's personal property and not fixtures, and Lessee has the right to remove the same at any time without Lessor's consent, except that if Lessee is in default under this Lease, it shall not remove the Communications Equipment without Lessor's consent.

32. Hazardous Materials. Lessee agrees that it will not use, generate, store or dispose of any Hazardous Material on, under, about or within the Demised Premises in violation of any law or

regulation. Lessor represents, warrants and agrees (1) that neither Lessor nor, to Lessor's knowledge, any third party has used, generated, stored or disposed of, or permitted the use, generation, storage or disposal of, any Hazardous Material on, under, about or within the Property in violation of any law or regulation, and (2) that Lessor will not, and will not permit any third party to use, generate, store or dispose of any Hazardous Material on, under, about or within the Property in violation of any law or regulation. Lessor and Lessee each agree to defend, indemnify and hold harmless the other and the other's partners, affiliates, agents and employees against any and all losses, liabilities, claims and/or costs (including reasonable attorneys' fees and costs) arising from any breach of any representation, warranty or agreement contained in this paragraph. As used in this paragraph, "Hazardous Material" shall mean petroleum or any petroleum product, asbestos, and any substance, chemical or waste that is identified as hazardous, toxic or dangerous in any applicable federal, state or local law or regulation. This paragraph shall survive the termination of this Agreement.

IN WITNESS WHEREOF, the parties hereto have set their hands and affixed their respective seals the day and year first above written.

ATTEST: \_\_\_\_\_  
Secretary

LESSEE:  
TTM OPERATING CORPORATION, INC.

By: \_\_\_\_\_ (Seal)  
Title:

ATTEST: \_\_\_\_\_  
City Controller

LESSOR:  
CITY OF BETHLEHEM

By: \_\_\_\_\_ (Seal)  
John B. Callahan  
Mayor

I certify that the within Lease Agreement is needed, necessary and appropriate.

By: \_\_\_\_\_  
City of Bethlehem Department Head  
Print Name: \_\_\_\_\_

**EXHIBIT A**

**DESCRIPTION OF REAL PROPERTY**

This Exhibit A is part of that certain Tower Lease Agreement dated \_\_\_\_\_, 2008, by and between the CITY OF BETHLEHEM as Lessor, and TTM OPERATING CORPORATION, Inc. a Nevada corporation, as Lessee.

The Real Property is described and/or depicted as follows:

(See Attached)

**EXHIBIT B**

**DESCRIPTION OF COMMUNICATIONS EQUIPMENT**

This Exhibit B is part of that certain Tower Lease Agreement dated \_\_\_\_\_, 2008, by and between the CITY OF BETHLEHEM as Lessor, and TTM OPERATING CORPORATION, Inc. a Nevada corporation, as Lessee.

The Communications Equipment is described and/or depicted as follows:

(See Attached)

**EXHIBIT C**

**DESCRIPTION OF BUILDING SPACE**

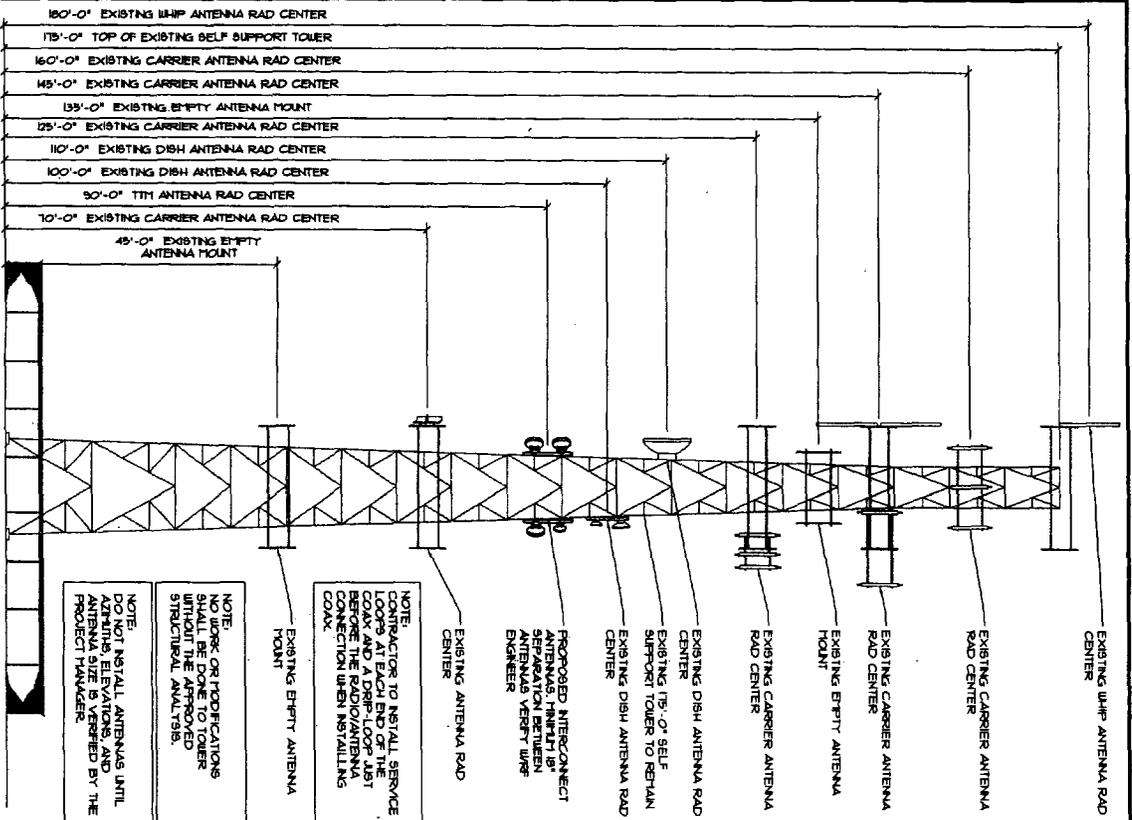
This Exhibit C is part of that certain Tower Lease Agreement dated \_\_\_\_\_, 2008, by and between the CITY OF BETHLEHEM as Lessor, and TTM OPERATING CORPORATION, Inc. a Nevada corporation, as Lessee.

Lessee's space occupied within Lessor's Building is described and/or depicted as follows:

(See Attached)







**TOWER ELEVATION**  
SCALE: 1" = 20'-0"  
**1**

NOTE:  
CONTRACTOR TO INSTALL SERVICE COAX AND A DRIP LOOP 18" BEFORE THE RADIO/ANTENNA CONNECTION WHEN INSTALLING COAX.

NOTE:  
NO WORK OR MODIFICATIONS SHALL BE DONE TO TOWER STRUCTURE WITHOUT THE SIGNATURE OF A REGISTERED STRUCTURAL ANALYST.

NOTE:  
DO NOT INSTALL ANTENNAS UNTIL AZIMUTH ELEVATIONS AND PROJECT PACKAGES ARE DETERMINED BY THE PROJECT MANAGER.

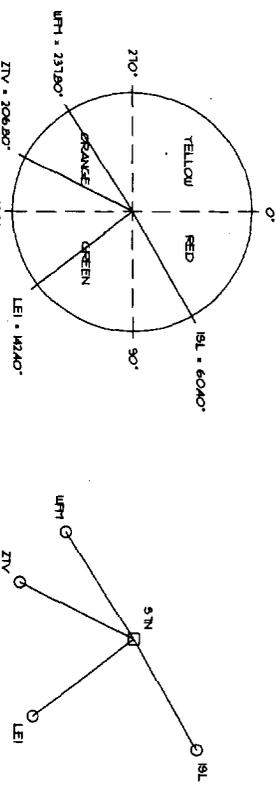
ANTENNA	LOOKING AT SITE	AZIMUTH	DOWNHILL	ANT SIZE	RADIO	ANT MODEL	CABLE SIZE	PROTECTED
ANTENNA 1	WPT	237.80°	0.71'	3'			1/2"	14
ANTENNA 2	ZTV	206.80°	-2.67'	2'			1/2"	14
ANTENNA 3	LEI	142.00°	-1.66'	3'			1/2"	14
ANTENNA 4	BL	60.40°	-0.95'	3'			1/2"	14

LOOKING AT SITE	COAX TO ANTENNA	COAX TO TOWER	COAX TO GROUND
BL	RED 1	WHITE 1	WHITE 1
LEI	GREEN 1	GREEN 1	WHITE 1
ZTV	ORANGE 1	ORANGE 1	WHITE 1
WPT	ORANGE 2	ORANGE 2	WHITE 2

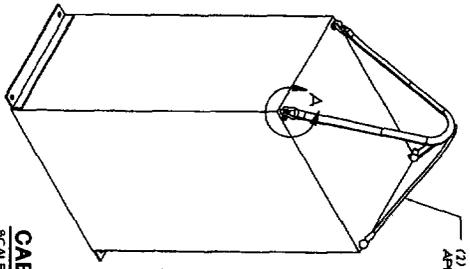
NOTE:  
ALL COAX SHALL BE MARKED INSIDE THE CABINET WITH BLACK OR WHITE "F-TOUCH" THERMALLY LABELED TAPE OF THE SITE. THE TAPE SHALL BE PLACED ON THE COAX NEAR THE END OF THE COAX & VISIBLE FROM THE FRONT OF THE CABINET.

NOTE:  
(2) COAX TO BE RAN TO NEW INTERCONNECT ANTENNA (1) COAX TO BE UTILIZED (1) COAX FOR FUTURE USE. PLACED ON THE COAX NEAR THE END OF THE COAX & VISIBLE FROM THE FRONT OF THE CABINET.

NOTE:  
PROTECTED INFORMATION:  
14 - (1) COAX CABLE  
14 - (2) COAX CABLES



**ANTENNA INFO & COLOR CODING**  
SCALE: NTS  
**2**



NOTE: ALL FOUR LIFTING EYES MUST BE USED WHEN LIFTING CABINET. LIFTING EYES SHOULD BE AT 45 DEGREES TO THE CABINET EDGE.

**DETAIL A**

**CABINET LIFTING DETAIL**  
SCALE: NTS  
**3**

**TTM**  
TALCON TRANSPORT  
MANUFACTURING, INC.  
140 S. STATE ST. SUITE 200  
MILWAUKEE, WI 53212  
TEL: 414.224.2200  
FAX: 414.224.2201  
WWW.TTM-TRANSPORT.COM

**W-T**  
W-T COMMUNICATIONS  
WIRELESS GROUP, LLC  
1000 W. WISCONSIN AVENUE  
MILWAUKEE, WI 53212  
TEL: 414.224.2200  
FAX: 414.224.2201  
WWW.WT-COMMUNICATIONS.COM

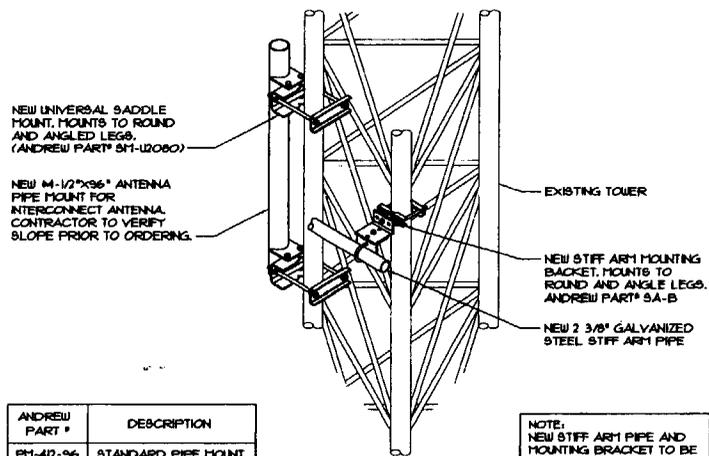
PROJECT NO:	TAM215
DRAWN BY:	DMW
CHECKED BY:	JGR
DATE:	
SCALE:	AS SHOWN

PHL-STN  
UNIVERSITY DRING  
MILWAUKEE, WI 53212

SHEET NUMBER  
**A-2**







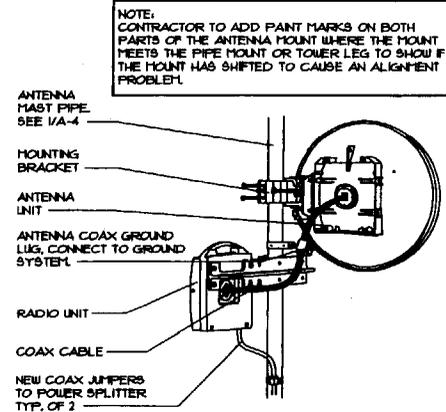
ANDREW PART #	DESCRIPTION
FM-412-96	STANDARD PIPE MOUNT
FM-417-96	TAPERED PIPE MOUNT

NOTE:  
NEW STIFF ARM PIPE AND MOUNTING BRACKET TO BE UTILIZED WITH 3' ANTENNAS.

**ANTENNA MOUNT (TYP)**

SCALE: N.T.S.

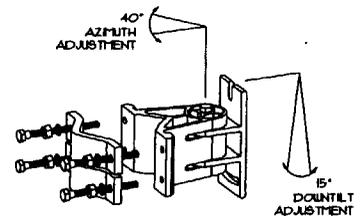
1



NOTE:  
ALL MOUNTING HARDWARE FOR ANTENNA IS INCLUDED WITH ANTENNA PACKAGING.

NOTE:  
CONTRACTOR TO LABEL DIRECTLY ON EACH ANTENNA WITH A PERMANENT MARKER (SHARPER) THE AZIMUTH, WHAT SITE IT SHOOTS TO, DOWN TILT, ETC., UPON COMPLETION OF INSTALLATION.

NOTE:  
CONTRACTOR TO USE PROPER TOOLS WHEN WORKING ON TTI FACILITIES. THE USE OF CHANNEL LOCK PLIERS OR CRESCENT WRENCHES INSTEAD OF THE PROPER BOX END OR SOCKET WRENCHES WILL NOT BE TOLERATED. ALSO, WHEN TORQUE SETTINGS ARE PROVIDED, IT IS EXPECTED THE PROPER TORQUE BE USED.

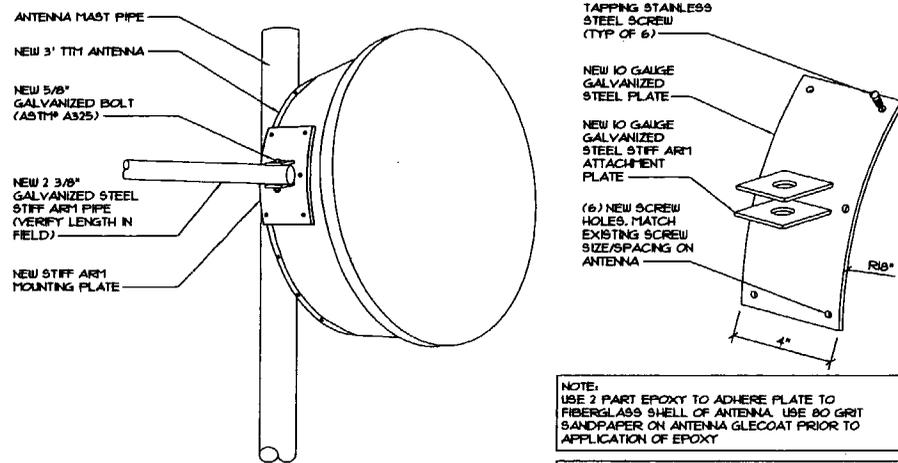


THE MOUNTING KIT FOR THE COMPACT ANTENNAS. THE ELEVATION CAN BE ADJUSTED BY 15 DEG. THE AZIMUTH CAN BE ROTATED 140 DEG. AND HAS FINE ADJUSTMENT.

**INTERCONNECT ANTENNA MOUNT / PIPE MOUNT DETAIL**

SCALE: N.T.S.

2



NOTE:  
USE 2 PART EPOXY TO ADHERE PLATE TO FIBERGLASS SHELL OF ANTENNA. USE 60 GRIT SANDPAPER ON ANTENNA GLECOAT PRIOR TO APPLICATION OF EPOXY.

NOTE:  
ALL NUTS, BOLTS, AND WASHERS TO BE GALVANIZED.

**STIFF ARM MOUNT TO 3' ANTENNA / 3' ANTENNA MOUNTING PLATE DETAIL**

SCALE: N.T.S.

3

**TTM**  
TELECOM TRANSPORT  
MANAGEMENT, INC.

148 N. BROAD ST. SUITE 500  
BETHLEHEM, PA 18013  
PH: (610) 402-2800  
FAX: (610) 402-2801

**WT**

W-T COMMUNICATION  
DESIGN GROUP, LLC

1000 Park Ave  
Bethlehem, PA 18015  
PH: (610) 402-2800  
FAX: (610) 402-2801  
www.wtcomm.com

PROJECT NO: T080315

DRAWN BY: DKW

CHECKED BY: JCR

1 \$3,04.00 FOR CONSTRUCTION

SCOTT R. WERNER P.E.  
LICENSED PROFESSIONAL ENGINEER  
STATE OF PENNSYLVANIA  
LICENSE # PE000077

PHL-S7N

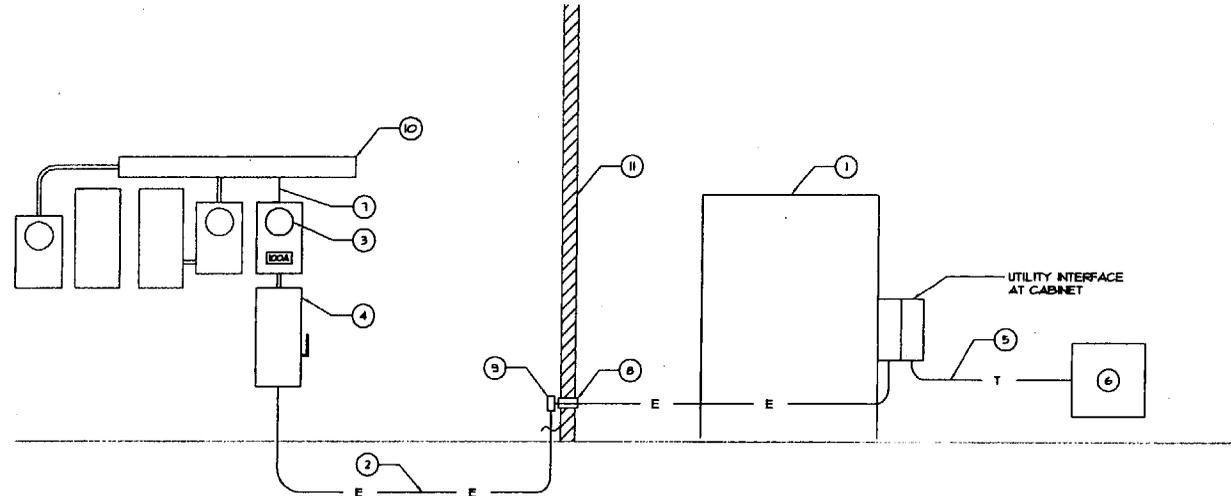
UNIVERSITY DRIVE  
BETHLEHEM, PA 18015

SHEET TITLE  
**ANTENNA MOUNTING  
DETAILS**

SHEET NUMBER

**A-5**

1. NEW 4'x28"x84" TYPE 2 MAGNETEK N3R ENCLOSURE
2. NEW 2" ELECTRIC CONDUIT RUN FROM TTM EQUIPMENT CABINET ALONG INTERIOR SHELTER WALL, PENETRATE WALL AND RUN UNDERGROUND TO NEW DISCONNECT, BURY PER NEC REQUIREMENTS
3. NEW 100 AMP METER TO BE MOUNTED TO EXISTING H-FRAME
4. NEW 100A SINGLE PHASE FUSED DISCONNECT
5. NEW 2" TELEPHONE CONDUIT TO NEW TELCO JUNCTION BOX FROM TTM CABINET, CONDUIT TO BE INSTALLED WITH 3 NEW FULL STRINGS
6. NEW 12"x12"x6" NEMA 3R TELCO JUNCTION BOX
7. NEW 3" ELECTRIC CONDUIT RUN FROM METER TO TROUGH FOR POWER CONNECTION
8. NEW WALL PENETRATION, SEE 3/A-4
9. NEW L.B. TO BE INSTALLED
10. EXISTING TROUGH TO BE UTILIZED
11. EXISTING SHELTER WALL



NOTE:  
CONTRACTOR TO USE SEAL TIGHT WHIPS ABOVE GRADE AND PVC CONDUIT BELOW GRADE.

NOTE:  
CONTRACTOR TO LABEL EXPOSED CONDUITS WITH TAPE IDENTIFYING CONTENTS INSIDE (TELEPHONE, ELECTRIC, COAX, ETC.)

NOTE:  
DISCONNECTION OF EXISTING TELCO FROM EXISTING RADIO CABINET TO BE COORDINATED WITH TTM PROJECT MANAGER

### POWER & TELEPHONE SINGLE LINE DIAGRAM

SCALE: N.T.S.

1

NEW CONDUIT WALL SUPPORT. SEE 2/A-3

NEW 2" TELCO CONDUIT, RUN TO NEW TELCO JUNCTION BOX

(2) 1 5/8"x1 5/8" GALVANIZED STEEL STRUT, FASTEN TO STUDS IN WALL WITH GALVANIZED SCREWS (TYP) CUT TO CORRECT LENGTH IN FIELD

NEW 12"x12"x6" NEMA 3R TELCO JUNCTION BOX



### TELEPHONE DETAIL

SCALE: N.T.S.

2

NEW 3" CONDUIT FROM METER TO ELECTRIC TROUGH FOR POWER CONNECTION

NEW 100A METER TO BE MOUNTED TO EXISTING H-FRAME

NEW 2" CONDUIT FROM METER TO DISCONNECT

(2) 1 5/8"x1 5/8" GALVANIZED STEEL STRUT, FASTEN TO POST WITH GALVANIZED BOLTS, WASHERS, AND NUTS (TYP) CUT TO CORRECT LENGTH IN FIELD

NEW DISCONNECT TO BE MOUNTED TO EXISTING H-FRAME

NEW 2" ELECTRIC CONDUIT TO NEW DISCONNECT



### ELECTRIC DETAIL

SCALE: N.T.S.

3

**TTM**

TELECOM TRANSPORT  
MANAGEMENT, INC.

146 N. DAVEN ST., SUITE 210  
SEATTLE, WA 98103  
PH: (206) 835-7288  
FAX: (206) 842-2888

**WT**

W-T COMMUNICATIONS  
SERVICES GROUP, LLC

10000 1st Ave.  
Bellevue, WA 98003  
PH: (206) 835-7288  
FAX: (206) 842-2888

PROJECT NO: T080316

DRAWN BY: DKW

CHECKED BY: JKR

1 11/10/08 FOR CONSTRUCTION

SCOTT R. TRIPPHARI P.E.  
LICENSED PROFESSIONAL ENGINEER  
STATE OF PENNSYLVANIA  
LICENSE # 100000007

PHL-S7N

UNIVERSITY DRIVE  
BETHLEHEM, PA 18015

SHEET TITLE

UTILITY DETAILS

SHEET NUMBER

A-6



**EXHIBIT D**

**FORM OF MEMORANDUM OF AGREEMENT**

CLERK: Please return this document to:

Telecom Transport Management, Inc.  
146 North Canal Street, Suite 210  
Seattle, WA 98103  
Attention: Lease Administration

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COMMONWEALTH OF PENNSYLVANIA

COUNTY OF \_\_\_\_\_

**MEMORANDUM OF AGREEMENT**

This Memorandum of Agreement is entered into on this \_\_\_\_ day of \_\_\_\_\_, 2008, by and between the CITY OF BETHLEHEM, doing business at 10 East Church Street, Bethlehem, Pennsylvania, 18018 ("Lessor"), and TTM OPERATING CORPORATION, Inc., a Nevada corporation with an office at 146 North Canal Street, Suite 210, Seattle, Washington 98103 ("Lessee").

1. Lessor and Lessee entered into a Tower Lease Agreement ("Agreement") on the \_\_\_\_ day of \_\_\_\_\_, 2008, for the purpose of installing, operating and maintaining a radio communications facility and other improvements. All of the foregoing are set forth in the Agreement.
2. The initial term of the Agreement is for three (3) years commencing on the earlier to occur of the following: (i) commencement of construction; or (ii) \_\_\_\_\_, ("Commencement Date"), and ending on the third (3rd) anniversary of the Commencement Date, with four (4) additional three (3) year options to renew.
3. The Real Property which is the subject of the Agreement is described in Exhibit A annexed hereto. The portion of the Property being leased to Lessee (the "Demised Premises") is described in Exhibit B annexed hereto.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Agreement as of the day and year first above written.

LESSOR:

LESSEE:

CITY OF BETHLEHEM

TTM OPERATING CORPORATION, INC.

By: EXHIBIT ONLY DO NOT EXECUTE

By: EXHIBIT ONLY DO NOT EXECUTE

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

COMMONWEALTH OF PENNSYLVANIA )  
: SS:  
COUNTY OF NORTHAMPTON )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, Cynthia S. Bartera, the undersigned officer, personally appeared JOHN B. CALLAHAN, Mayor of the City of Bethlehem, Pennsylvania, known to me to be the person described in the foregoing instrument, and acknowledged that he executed the same in his official capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

\_\_\_\_\_  
Notary Public (Seal)

My Commission Expires: \_\_\_\_\_

STATE OF WASHINGTON

COUNTY OF KING

On \_\_\_\_\_, 2008, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that \_\_\_he executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public in and for the State of Washington (SEAL)

My commission expires: \_\_\_\_\_