

NEW JERSEY TURNPIKE AUTHORITY

Installation Cost for 8 GHz Digital Microwave System

| <u>Equipment</u> | <u>SITE</u> | <u>Deepwater</u> | <u>Swedesboro</u> | <u>Woodbury</u> | <u>Moorestown</u> | <u>Florence</u> | <u>West Trenton</u> | <u>Bordentown</u> | <u>Hightstown</u> | <u>Crr</u> |
|-------------------------|-------------|------------------|-------------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|------------|
| Radio Equip | \$ | 94,969 | \$ 189,938 | \$ 189,938 | \$ 189,938 | \$ 94,969 | \$ 94,969 | \$ 379,876 | \$ 284,907 | \$ |
| Multiplex | | 57,915 | 57,915 | 57,915 | 57,915 | 57,915 | 57,915 | 57,915 | 57,915 | |
| Antennas | | 13,497 | 26,994 | 26,994 | 26,994 | 13,497 | 13,497 | 53,987 | 40,491 | |
| DC Power & Distribution | | 10,570 | 10,570 | 10,570 | 10,570 | 10,570 | 10,570 | 10,570 | 10,570 | |
| Tower Upgrades | | | 111,480 | | | 91,460 | 111,480 | | | |
| Tower Replacement | | | | | 317,436 | | | | | |
| Tower Analysis | | | 7,879 | | 7,879 | 7,879 | 7,879 | | | |
| Electrical Site Work | | 70,323 | | 33,086 | | | | 45,396 | 67,165 | |
| Radio Hut & Site Work | | 5,071 | 11,306 | 75,900 | | 11,306 | 11,788 | 5,071 | 5,071 | |
| Spare Equipment | | 14,521 | 14,521 | 14,521 | 14,521 | 14,521 | 14,521 | 14,521 | 14,521 | |
| Project Mgmt | | 1,822 | 9,762 | 1,822 | 9,762 | 9,762 | 9,762 | 1,822 | 1,822 | |
| TOTAL | \$ | 268,688 | \$ 440,365 | \$ 410,746 | \$ 635,015 | \$ 311,879 | \$ 332,381 | \$ 569,158 | \$ 482,462 | \$ |



MOTOROLA

**NEW JERSEY TURNPIKE AUTHORITY
ATTN: WINSTON CHAFIN
SUBJECT: TOWER REPLACEMENT/REINFORCEMENT SOUTH
FROM: JACK CURRAN**

TOWER UPGRADES \$ 301,670.00

**SWEDESBORO
WEST TRENTON
FLORENCE**

DEEPWATER \$ 7,600.00

**ANTENNA & TRANSMISSION CABLE
INSTALLATION**

HIGHT \$ 7,600.00

**ANTENNA'S & TRANSMISSION CABLE
INSTALLATION**

MOORESTOWN TOWER REPLACEMENT \$ 309,496.50

**SOIL BORINGS
FOUNDATION DESIGN
FOUNDATION CONSTRUCTION
TOWER STEEL
TOWER ERECTION
WAVEGUIDE/HARDWARE
ANTENNA'S / TRANSMISSION CABLE
INSTALLATION OF ANTENNA'S & CABLE**

ARCHITECTURAL FEES & PERMITS \$ 11,360.00

PROGRAM MANAGEMENT \$ 20,400.00

SOUTH TOTAL \$ 658,126.50

TOWER PRICING INCLUDES:

**BEACON
PAINTING
SAFETY LADDER
LIGHTNING KIT
GROUNDING**



MOTOROLA

NEW JERSEY TURNPIKE AUTHORITY
 ATTN: WINSTON CHAFIN
 SUBJECT: TOWER REPLACEMENT/REINFORCEMENT / NORTH
 FROM: JACK CURRAN

KEARNY

ELECTRICAL SERVICE \$ 178,238.00
 ICE BRIDGE
 SHELTER
 WAVEGUIDE / HARDWARE

WOODBIDGE

\$ 54,386.00

ELECTRICAL WORK

BAYONNE TOWER REPLACEMENT

\$ 324,497.00

FOUNDATION DESIGN
 FOUNDATION CONSTRUCTION
 TOWER STEEL
 TOWER ERECTION
 ANTENNA'S / TRANSMISSION CABLE
 INSTALLATION OF ANTENNA'S & CABLE

ARCHITECTURAL FEES & PERMITS

\$ 17,040.00

PROGRAM MANAGEMENT

\$ 30,600.00

NORTH TOTAL

\$ 604,761.00

TOWER PRICING INCLUDES:

BEACON
 PAINTING
 SAFETY LADDER
 LIGHTNING KIT
 GROUNDING



PURCHASE ORDER NEW JERSEY TURNPIKE AUTHORITY

P.O. BOX 1121
NEW BRUNSWICK, NEW JERSEY 08903

No. PO 000006131
THIS NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES, AND BILLS OF LADING

TO: MOTOROLA C & E INC.

SHIP TO: NEW JERSEY TURNPIKE AUTHORITY

85 HARRISTOWN ROAD
GLEN ROCK

NJ 07452

Administration Bldg.
Rt. 18 & Int. 9
East Brunswick NJ 08816
Attn: Winston Chafin
MTCE CODE

| | | | | |
|---|-----------------------------------|----------------------|-----------------------------------|--------------------------|
| PURCHASE ORDER DATE 01/31/95 | DELIVERY REQUIRED 180 DAYS ARO | TERMS NET 30 DAYS | F.O.B. DESTINATION | REQUISITION NO. 36200 |
| REQUISITIONING DEPT. COMMUNICATIONS/OP | | | PROMISE DEL. DATE 180 DAYS ARO | |

| TURNPIKE NO. | ITEM | QTY | U/M | DESCRIPTION | ACCT. NO. | UNIT PRICE | AMOUNT |
|--------------|------|-----|-----|--|-----------|------------|----------|
| | 001 | 1 | LT | Turnkey replacement/expansion 92-TSM-7755-0000 of Authority's microwave radio relay system, comprised of 12 existing and 4 new stations. The new system shall be characterized by 99.9999% electronic/path reliability, Bell T1 compatability and full simulcast capability. New, as well as, existing stations shall be fully complimented down to the channel level. All electronic equipment and major electro/ mechanical components shall be spared at the 10% or one unit minimum level. Major electronic system spares shall be fully racked up for training purposes. Furnish and install the following major new equipment components at all locations: -- Redundant 6GHz, DS3, digital radios -- Digital drop/insert (two-way) multiplexors -- Mark (fully-floating) enclosed antennas -- PCP redundant DV battery supplies and distribution -- Internal network support hardware Services to include: -- Project management -- Mobilization/installation -- Training -- Frequency coordination/license application -- Two-year, full coverage on-site warranty (7-day, 24-hours) | | ***** | 4798988. |

PURCHASING DEPT. CODE

TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE

Do not render an invoice until this order has been completely delivered

NEW JERSEY TURNPIKE AUTHORITY

Federal excise taxes, and N.J. State Sales and Use Tax, from which the Purchaser is exempt, should not be added to invoice

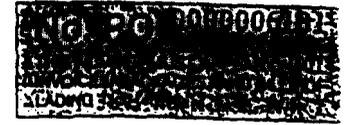
W. J. Trause

ADMINISTRATOR, PURCHASING/OFFICE SERVICE



PURCHASE ORDER
NEW JERSEY TURNPIKE AUTHORITY

P.O. BOX 1121
NEW BRUNSWICK, NEW JERSEY 08903



MOTOROLA C & E INC.

85 HARRISTOWN ROAD
GLEN ROCK

NJ 07452

SHIP TO: NEW JERSEY TURNPIKE AUTHORITY
Administration Bldg.
Rt. 18 & Int. 9
East Brunswick NJ 08816
Attn: Winston Chafin

MTCE CODE

| | | | | |
|---------------------------------|-----------------------------------|----------------------|--------------------|--------------------------|
| PURCHASE ORDER DATE 01/31/95 | DELIVERY REQUIRED 180 DAYS ARO | TERMS NET 30 DAYS | FOR DESTINATION | REQUISITION NO. 36200 |
|---------------------------------|-----------------------------------|----------------------|--------------------|--------------------------|

| | |
|---|-----------------------------------|
| REQUISITIONING DEPT. COMMUNICATIONS/OP | PROMISE DEL. DATE 180 DAYS ARO |
|---|-----------------------------------|

| LINE NO. | ITEM | QTY | U/M | DESCRIPTION | ACCT. NO. | UNIT PRICE | AMOUNT |
|---------------------|------|-----|-----|--|-----------|------------|--------------|
| | | | | <p>Except for unavoidable planned outages not exceeding a few hours, at the Authority's convenience, the vendor shall maintain full integrity of the existing system, to the extent of his involvement, during installation and cutover of the replacement system, which shall be phased and seamless throughout.</p> <p>All else as per Motorola's 20 page proposal dated 1/12/95, copy enclosed.</p> <p>STATE CONTRACT NUMBER A64625</p> <p>C/M 12-22-94</p> <p>It is anticipated that costs will not exceed the amount shown on Purchase Order. Any increase of the total amount shall be at the sole risk of the vendor.</p> | | | |
| TOTAL AMOUNT | | | | | | | 4,798,988.75 |

ISSUING DEPT. CODE

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TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE

NEW JERSEY TURNPIKE AUTHORITY

James J. ...

ADMINISTRATIVE - PURCHASING OFFICE

...al excise taxes, and N.J. State Sales and Use Tax, from which the Purchaser is ... should not be added to Invoice

NEW JERSEY TURNPIKE AUTHORITY

MICROWAVE SYSTEM COST SUMMARY

| | | |
|----------|---|------------------------------|
| 32 ----- | HOT STANDBY DIGITAL RADIOS | <u>\$3,039,001.24</u> |
| 16 ----- | DIGITAL MULTIPLEX SYSTEMS | <u>\$926,640.10</u> |
| 16 ----- | ANTENNA SYSTEMS | <u>\$431,898.75</u> |
| 16 ----- | DC POWER SUPPLY AND DISTRIBUTION | <u>\$169,120.00</u> |
| 1 LOT -- | SPARE EQUIPMENT | <u>\$ 232,328.76</u> |
| ----- | PROJECT MANAGEMENT | <u>INCLUDED</u> |
| ----- | MOBILIZATION / INSTALLATION | <u>INCLUDED</u> |
| ----- | TRAINING /LICENSE | <u>INCLUDED</u> |
| ----- | TWO YEAR ON-SITE WARRANTY FULL COVERAGE (7-DAY , 24 HRS) | <u>INCLUDED</u> |
| | TOTAL TURN-KEY SYSTEM COST | <u>\$4,798,988.75</u> |

| SH 1 OF 1 | | A.P.C. | TEA | SEC | KNY | NWK | BAY | WDB | NBK | CBY | HTN | BTW | WTM | FLO | MTN | WBY | SWB | DPW | SP | QUAN |
|--------------------------|--------------------------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|------|
| CUSTOMER | NEW JERSEY TURNPIKE AUTHORITY | | | | | | | | | | | | | | | | | | | |
| PREPARED BY: JACK CURRAN | DATE: 1/25/95 | | | | | | | | | | | | | | | | | | | |
| TELEPHONE #609-584-9231 | | | | | | | | | | | | | | | | | | | | |
| MODEL# | DESCRIPTION | | | | | | | | | | | | | | | | | | | |
| MWK17TYD2676A | TELESTAR 6 PROTECTED TERMINAL | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 34 |
| MWP407AH | DS3 PROTECTED INTERFACE | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 34 |
| MWP422AH | ADAPTIVE TIME DOMAIN EQUALIZER | 131 | | | | | | | | | | | | | 1 | 1 | | | | 2 |
| MWP333AN | 7.5' RELAY RACK | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 34 |
| MWP141AM | SERVICE CHANNEL UNIT | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 34 |
| MWP154AB | ORDERWIRE UNIT W/HANDSET | 131 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 18 |
| MWP428AA | STATUS & CONTROL EXTENDER | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 34 |
| MWP404AH | WAYSIDE T1 UNIT | 131 | | | | | | | | | | | | | | | | | | 0 |
| MWIHDSTR1AFTB0 | TRIM AUX FUSE/TERM BLOCK PANEL | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 34 |
| MWM1202A | PROTECTED M13 MULTIPLEXER | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 34 |
| MWMLN7118A | FUSE & ALARM PANEL | 131 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 |
| MWP369AFSP | MOUNT M13 TO RACK | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | | 32 |
| MWP369AGSP | MOUNT FUSE PANEL TO RACK | 131 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 16 |
| MWP370AESP | MOUNT LOW SPEED MODULES | 131 | 14 | 14 | 14 | 14 | 21 | 14 | 14 | 7 | 12 | 28 | 7 | 7 | 14 | 4 | 14 | 14 | 0 | 224 |
| MWMLN7113A | 4XDS1 LOW SPEED MODULE | 131 | 14 | 14 | 14 | 14 | 21 | 14 | 14 | 7 | 12 | 28 | 7 | 7 | 14 | 4 | 14 | 14 | 0 | 224 |
| B918 | IMACS/800 UNIVERSAL ENCL | 131 | 1 | 1 | 1 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 25 |
| B920 | 8 T1/E1 INTERFACE CARD W/MODEM | 131 | | 1 | | 2 | 1 | 1 | 6 | 1 | 1 | 2 | | | 1 | | 1 | | 2 | 19 |
| B926 | 2 T1 INTERFACE CARD W/MODEM | 131 | 1 | | 1 | | | | | | | | 1 | 1 | | 1 | | 1 | 1 | 7 |
| B902 | DC SUPPLY | 131 | 1 | 1 | 1 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 25 |
| B904 | RING GENERATOR | 131 | 1 | 1 | 1 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 25 |
| B800 | CPU CONTROL WITH 2 T1/E1 BUS | 131 | 1 | | 1 | | | | | | | | 1 | 1 | | 1 | | 1 | 1 | 7 |
| B801 | CPU CONTROL WITH CROSS CONN | 131 | | 1 | | 2 | 1 | 1 | 6 | 1 | 1 | 2 | | | 1 | | 1 | | 1 | 18 |
| B804 | CPU CONTROL WITH 4 T1/E1 BUS | 131 | | | | | | | | | | | | | | | | | | 0 |
| B010 | DUAL T1/E1 LINE INTERFACE | 131 | 1 | 2 | 1 | 4 | 2 | 1 | 16 | 2 | 2 | 4 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 44 |
| B11 | DSX/CERT PLUG IN MODULE | 131 | 2 | 4 | 2 | 8 | 4 | 2 | 32 | 4 | 4 | 8 | 2 | 2 | 4 | 2 | 2 | 2 | 4 | 88 |
| B220 | 10 PORT RS-232 SUB RATE | 131 | 1 | 1 | 1 | 1 | 1 | 1 | 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 31 |
| B118 | 8 PORT 4-WIRE E&M/TO | 131 | 1 | 3 | 1 | 4 | 3 | 1 | 24 | 3 | 3 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 54 |
| B124 | 4 PORT 2-WIRE FXS 900 | 131 | 1 | | 1 | | | 1 | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | 9 |
| B128 | 8 PORT 2-WIRE FXS 900 | 131 | | 2 | | 3 | 1 | | | 1 | 2 | 1 | | | 2 | | | | 1 | 13 |
| B134 | 4 PORT 2-WIRE FXO 900 | 131 | 1 | | 1 | | | 1 | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | 9 |
| B138 | 8 PORT 2-WIRE FXO 900 | 131 | | 2 | | 3 | 1 | | 16 | | | | | | | | | | 1 | 23 |
| 1207 | 6' 3 TO 4 50 PIN E & M CABLE | 131 | 1 | 1 | 1 | 3 | 1 | 1 | 8 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 26 |
| 1208 | 6' 3 TO 1 50 PIN FXS & FXO | 131 | 1 | 1 | 1 | 2 | 2 | 1 | 24 | 2 | 4 | 4 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 52 |
| 1231 | 25' RJ48M TO RJ48M T1 CABLE | 131 | 1 | 1 | 1 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 23 |
| B401 | EXTERNAL ALARM | 131 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 |
| | PREMLINK | 131 | | | | | | | 1 | | | | | | | | | | | 1 |
| | SUN WORKSTATION | | | | | | | | 1 | | | | | | | | | | | 1 |
| MWP333AG | 7.5' RELAY RACK | 131 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 18 |
| DS01001120101 | 12 PORT DSX CROSS CONNECT | 131 | | | | | | | | | | | | | | | | | | 0 |
| DS01001320101 | 32 PORT DSX CROSS CONNECT | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | | 30 |
| SERVICE | MOUNT & WIRE DSX BLOCK | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | | 30 |
| | TELESCAN 3000 OMC/MD | 131 | | | | | | | 1 | | | | | | | | | | | 1 |
| | TELESCAN 3000 LMT | 131 | | | | | | | 1 | | | | | | | | | | | 1 |
| | TELESCAN 3000 RIU | 131 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 |
| | TELESCAN 3000 NMU | 131 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 33 |

| | | | TEA | SEC | KNY | NWK | BAY | WDB | NBK | CBY | HTN | BTW | WTN | FLO | MTN | WBY | SWB | DPW | SP | QUAN |
|--------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|----|------|
| DQP65A96 | MARK 8 FOOT ANTENNA | 229 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 33 |
| DQR96W | MARK 8 FOOT RADOME | 229 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | | 32 |
| DOMMTG | ANTENNA MOUNTING BRACKET | 229 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | | 32 |
| DSEWP6365N | EW63 WAVEGUIDE | 229 | 380 | 360 | 353 | 100 | 725 | 425 | 400 | 110 | 620 | 1140 | 160 | 180 | 500 | 520 | 330 | 260 | | 6563 |
| DS42396A7 | WAVEGUIDE HANGER KIT OF 10 | 229 | 13 | 12 | 12 | 1 | 20 | 14 | 12 | 5 | 20 | 38 | 6 | 6 | 16 | 16 | 11 | 9 | | 211 |
| TDN6950A | ANGLE ADAPTER | 229 | 13 | 12 | 12 | 1 | 20 | 14 | 12 | 5 | 20 | 38 | 6 | 6 | 16 | 16 | 11 | 9 | | 211 |
| TDN7548A | WAVEGUIDE GROUNDING KIT | 229 | 6 | 6 | 6 | 6 | 9 | 6 | 6 | 3 | 9 | 12 | 3 | 3 | 6 | 6 | 3 | 3 | | 93 |
| DOMDN6826A | WAVEGUIDE CONNECTOR KIT EW63 | 229 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 5 | 1 | 1 | 4 | 2 | 3 | 1 | | 36 |
| DSMT300201 | AUTOMATIC DEHYDRATOR | 229 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 |
| DSAE01KC0331 | INSTALLATION KIT | 229 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 16 |
| DS66M1KIT | 66 BLOCK KIT | 229 | | | | | | | | | | | | | | | | | | 0 |
| DS25PP30 | 25' CONNECTORIZED CABLES | 229 | | | | | | | | | | | | | | | | | | 0 |
| MDN7152A | REDUNDANT 48VDC-25A BAT CHG | 229 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 16 |
| MDN7214A | 48VDC-160A BATTERY SYSTEM | 207 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 16 |
| DSUS16524 | BATTERY RACK | 229 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 16 |





PURCHASE ORDER NEW JERSEY TURNPIKE AUTHORITY

P.O. BOX 1121
NEW BRUNSWICK, NEW JERSEY 08903

No. PO 0000005
THIS NUMBER MUST APPEAR ON
INVOICES, PACKAGES, AND BILL
LADING

TO: MOTOROLA C & E INC.

SHIP TO: NEW JERSEY TURNPIKE AUTHORITY

67 BENSON AVENUE
TRENTON NJ 08610

Administration Bldg.
Rt. 16 & Int. 9
East Brunswick NJ 08817
Attn: Winston Chafin
MTCE CODE

| PURCHASE ORDER DATE 06/19/95 | | DELIVERY REQUIRED AS REQUIRED | | TERMS NET 30 DAYS | | F.O.B. DESTINATION | | REQUISITION NO. 35914 | |
|---------------------------------|------|----------------------------------|-----|--|--|----------------------------------|--------------|--------------------------|--|
| REQUISITIONING DEPT. | | | | | | PROMISE DEL. DATE AS REQUIRED | | | |
| TURNPIKE I. NO. | ITEM | QTY | U/M | DESCRIPTION | | ACCT. NO. | UNIT PRICE | AMOUNT | |
| | 001 | 1 | LS | Provide tower analysis and reports for structural strengthening to insure SWB, MTN, WTN, FLO and KRY radio tower meet ANSI/EIA/TIA-222-E specifications. | | 92-TSM-7755-0000 | 39,395.0000 | 39,395.00 | |
| | 002 | 1 | LS | Site work, providing all labor and materials to install electrical, mechanical, ice bridge, permits, DCA fees and inspections for BTN, HTN, WBY, DPW, WTN, SWB and FLO communication shelters. | | 92-TSM-7755-0000 | 283400.0000 | 283,400.00 | |
| | | | | N.J. STATE CONTRACT #A64625 | | | | | |
| | | | | It is anticipated that cost will not exceed the amount shown on Purchase Order. Any increase of the total amount shall be at the sole risk of the vendor. | | | | | |
| | | | | DATE 05-10-95 | | | | | |
| | | | | | | | TOTAL AMOUNT | 133,795.00 | |

PURCHASING DEPT. CODE I 3H

TERMS AND CONDITIONS PRINTED ON THE REVERSE

NEW JERSEY TURNPIKE AUTHORITY

William J. ...
ADMINISTRATOR PURCHASING OFFICE SERVICE

... excise taxes, and N.J. State Sales and Use Tax, from which the Purchaser is exempt, should not be added to invoice

DEPARTMENT HEAD

New Jersey Turnpike Authority
 P.O. Box 1121
 Attn: Winston Chafin
 New Brunswick, New Jersey, 08903

May 8, 1995

Subject: Pricing for additional work requested by NJTP

Dear Mr. Chafin:

The following is the price Breakdown for the additional civil type work required by NJTP to complete the South site portion of the Microwave project. It does not include any pricing for tower strengthening if required after analysis is performed

Tower Analysis and Reports:

| | |
|--------------------|-------------|
| Swedesboro | \$7029.00 |
| Moorestown | \$7029.00 |
| West Trenton | \$7029.00 |
| Florence | \$7029.00 |
| Kearney | \$7029.00 |
| | |
| Project Management | \$4250.00 |
| | |
| Total | \$39,395.00 |

Pricing includes:

1. Field tower inspection of the existing towers and antennas to confirm the condition of existing steel, and to document the material makeup, and design of each tower.
2. Perform a structural analysis of each tower to determine compliance with ANSIEIA/TIA-222-E.
3. Produce two sealed structural analysis reports per tower with complete computer calculation output pages.
4. Produce three additional sealed structural analysis reports without the computer calculation output pages.
5. Provide quotation to strengthen tower structures to meet NJTP intended antenna load.

Civil Work

**Pricing by Site to perform civil work, i.e. electrical, mechanical, ice shielding etc.
 Pricing also includes permit applications, fees, and inspections.**

- 1. Bordantown \$45,395.60
- 2. Highstown \$67,166.00
- 3. Woodbury \$33,086.00
- 4. Deepwater \$70,322.60
- 5. West Trenton \$ 6,716.60
- 6. Swedesboro \$ 6,235.00
- 7. Florence \$ 6,235.00

Total \$235,156.80

Approximately 200ft of Paramount Ice bridging at Sites in South system

\$35,500.00

Program Management \$12,750.00

| | | |
|--------------------|--------------------------------|---------------------|
| Total Recap | Tower Analysis & PM | \$39,395.00 |
| | Civil Work | \$235,156.00 |
| | Ice Shield | \$35,500.00 |
| | Project Management | \$12,750.00 |
| | Grand Total | \$322,801.00 |

Pricing is per New Jersey State Contract A64625

Terms: Net 30 days; services as rendered.

Regards



**Peter J. Curran
 Motorola Inc.
 Account Executive**

Microwave Relocation - Bad Actor Form

2/21/96

Incumbent Name: **Detroit Edison**

Market / MTA: **Detroit**

Market freq. block: **B**

| | | | |
|--|-----------|---|-----------|
| Number of paths required for initial system: | 2 | Number of paths requested by incumbent for relo: | 2 |
| Estimated comparable cost per path: | \$175,000 | A paths: | |
| | | B paths: | 2 |
| Total estimated comparable cost: | \$350,000 | C - F paths: | |
| | | Non PCS paths: | |
| | | Per path cost requested by the incumbent: | \$475,200 |
| | | Additional payments requested by the incumbent: | \$0 |
| | | Total requested relocation cost by the incumbent: | \$950,400 |

Chain of events:

| <u>Date</u> | <u>Action</u> |
|-------------|---|
| 10/15/95 | Detroit Edison refuses to work with STV third party representative. Indicates desire to work directly with STV. |
| 11/10/95 | Detroit E&O Director contacts Detroit Edison directly on matters other than relocation to move matters along. STV corporate also contacts Detroit Edison to reiterate their desire to work to an agreement. (Date Approximate.) |
| 12/15/95 | Detroit Edison suggests a meeting with both the Corporate and local offices of STV for the date of January 10, 1996. |
| 1/10/96 | STV meets with Detroit Edison at their offices in Detroit. At the meeting, STV is presented their price for removing the two current links in question. STV attempts to question the figure, but is told, "not to dick around with their numbers" by Gary Mittleman, AVP of Business Development. |
| 2/7/96 | Detroit Edison provides a breakdown of cost figures for relocation. |

Additional Comments:

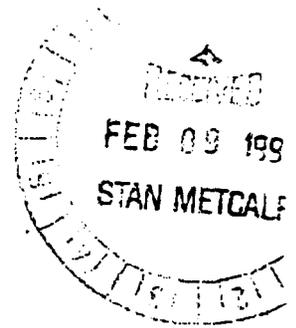
SPRINT PCS SPECTRUM RELINQUISHMENT COSTS

| | <u>1996</u> | <u>1997</u> | <u>1998</u> | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> | <u>2003</u> | <u>2004</u> | <u>2005</u> | <u>2006</u> |
|-------------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <u>SPRINT SPECTRUM</u> | | | | | | | | | | | |
| INSTALLED EQUIP. COST | | | | | | | | | | | |
| Thumb | \$ 42.0 | | | | | | | | | | |
| Fermi 2 | \$ 272.8 | | | | | | | | | | |
| <u>Overheads @ 21.6%</u> | \$ 83.1 | | | | | | | | | | |
| SUBTOTAL | \$ 397.9 | | | | | | | | | | |
| UNDEPRECIATED VALUE | | | | | | | | | | | |
| Thumb | \$ 88.0 | | | | | | | | | | |
| Fermi 2 | \$ 163.2 | | | | | | | | | | |
| SUBTOTAL | \$ 251.2 | | | | | | | | | | |
| DISMANTLING COSTS | | | | | | | | | | | |
| Thumb | \$ 10.0 | | | | | | | | | | |
| Fermi 2 | \$ 5.0 | | | | | | | | | | |
| <u>Overheads @ 156.4%</u> | \$ 23.5 | | | | | | | | | | |
| SUBTOTAL | \$ 38.5 | | | | | | | | | | |
| MISC. DE SALARIES | | | | | | | | | | | |
| | \$ 28.0 | | | | | | | | | | |
| <u>Overheads @ 156.4%</u> | \$ 43.8 | | | | | | | | | | |
| SUBTOTAL | \$ 71.8 | | | | | | | | | | |
| RECURRING LEASE COSTS | | | | | | | | | | | |
| Thumb | \$ 12.6 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 |
| Fermi 2 | | | | | | | | | | | |
| NPV of LEASE COSTS | \$ 191.1 | | | | | | | | | | |
| TOTAL NPV | \$ 950.5 | | | | | | | | | | |
| COST PER LINK | \$ 475.2 | | | | | | | | | | |



2000 Second Avenue
Detroit, Michigan 48226
(313) 237-8000

February 7, 1996



Mr. Dave McWherter
Director - Engineering & Operations
Sprint Telecom Venture
200 Galleria Officentre
Suite 111
Southfield, MI 48034

Dear Dave,

I enjoyed our discussion on January 11, 1996 concerning relocation and co-location matters related to the deployment of a PCS network. At that meeting we agreed to provide you with further documentation regarding the relocation costs that we submitted to you.

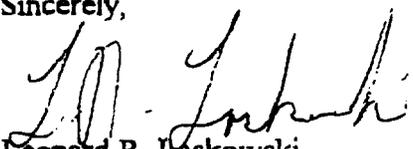
Enclosed with this letter (Attachments 1-2) you will find a description of equipment that is currently being used on each of the two proposed microwave replacement paths. Included on those same exhibits are calculations for the undepreciated value of the equipment. You will note that the figures are slightly different than submitted to you earlier. This is due to further analysis and review.

Also enclosed is a more detailed description and cost (Attachment 3) of the specific equipment that Edison intends to use to replace the existing Fermi 2 microwave link. When adding up these revised figures, you will notice that the total cost (Attachment 4) is slightly higher than originally proposed (Attachment 5).

In the interest of expediting our negotiations, we are willing to abide by the original offer submitted if we can conclude negotiations within a reasonable period of time.

I look forward to hearing from you and please let me know if you need additional information or explanation regarding the attachments.

Sincerely,


Leonard R. Laskowski
Director-Business Development

LRL:cb

Attachments

WP1196-023.doc

cc: D. Brett

✓ S. Metcalf

G. Mittleman

| B2 | | | | | |
|--|--|---------------------|---------------|------------------|-------------------|
| Fermi 2 to NOC Microwave System- Existing | | | | | |
| Item No. | Equipment Description | Model Number | Quant. | Unit Cost | Total Cost |
| 1 | Frequency Search & Licensing | | 1 | \$ 1,500 | \$ 1,500 |
| 2 | Motorola MR200 HTSB Terminal | K36HBF2400 | 2 | \$ 16,778 | \$ 33,556 |
| 3 | Andrew 6 ft. Antenna, Radome, & Mount | P6F-18C | 2 | \$ 1,497 | \$ 2,994 |
| 4 | Antenna feedline, connectors, clamps etc. | LDF-5P-50 | 1 | \$ 2,002 | \$ 2,002 |
| 5 | Spare Microwave Equipment- Motorola | Misc. | 1 | \$ 1,600 | \$ 1,600 |
| 6 | Exide 275 AH Battery System | 12EU5 | 1 | \$ 1,322 | \$ 1,322 |
| 7 | Exide 360 AH Battery System | 12EU7 | 1 | \$ 1,617 | \$ 1,617 |
| 8 | Quindar Alarm Equipment | | 2 | \$ 522 | \$ 1,044 |
| 9 | Electrical Equipment; Square D | | 1 | \$ 1,100 | \$ 1,100 |
| 10 | C&D Battery Chargers | ARR24A/C75 | 2 | \$ 1,215 | \$ 2,430 |
| 11 | Motorola Starplex MUX Assem. Common Equip. | | 1 | \$ 12,646 | \$ 12,646 |
| 12 | Motorola Starplex MUX 2W/4W E&M. | M1100 | 110 | \$ 672 | \$ 73,920 |
| 13 | Motorola Starplex MUX FXS | M1106 | 68 | \$ 808 | \$ 54,944 |
| 14 | Motorola Starplex MUX FXO | M1108 | 68 | \$ 808 | \$ 54,944 |
| 15 | Engineering Design & Document | | 1 | \$ 18,200 | \$ 18,200 |
| 16 | Construction Labor & Misc. Materials | | 1 | \$ 37,200 | \$ 37,200 |
| 17 | Communication Labor | | 1 | \$ 4,800 | \$ 4,800 |
| 18 | Pre-Fab Shop Labor & material | | 1 | \$ 13,400 | \$ 13,400 |
| | Total System Cost | | | | \$ 319,219 |
| | Residual Value | 13 | Years | | \$ 164,845 |

| B2 | | | | | |
|---|--|-------------|------|-----------|------------|
| Fermi 2 to NOC Microwave System Proposed | | | | | |
| Item | Model | | Unit | Total | |
| No. | Equipment Description | Number | uan | Cost | Cost |
| 1 | H/F 18 GHz HTSB Terminal DS3 | DVM-18 | 2 | \$ 49,567 | \$ 99,134 |
| 2 | Telco Channel Bank | | 14 | \$ 7,528 | \$ 105,398 |
| 3 | Andrew Antennas, Radome | | 2 | \$ 3,200 | \$ 6,400 |
| 4 | Andrew Feedline and hardware | | 2 | \$ 2,100 | \$ 4,200 |
| 5 | Antenna Mounting Fabrication | | 2 | \$ 5,000 | \$ 10,000 |
| 6 | C&D DC power bay | HRT24AC100E | 1 | \$ 7,866 | \$ 7,866 |
| 7 | Battery System -48 VDC; 600AH | DC-75-17 | 2 | \$ 7,378 | \$ 14,756 |
| 8 | System spares, test cables, and adapters | | 1 | \$ 22,060 | \$ 22,060 |
| 9 | Licensing and Frequency Search | | 2 | \$ 1,250 | \$ 2,500 |
| 10 | Racks, Support Hrdwr., Cabling | | 2 | \$ 1,375 | \$ 2,750 |
| 11 | Engineering, Construction, Tech Labor | | 1 | \$ 10,000 | \$ 10,000 |
| | | | | | \$ - |
| | Total System Cost: | | | | \$ 285,064 |
| | Interim Solution | | | | \$ - |
| | Grand Total: | | | | \$ 285,064 |

SPRINT PCS SPECTRUM RELINQUISHMENT COSTS-REVISED VERSION

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|------------------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| SPRINT SPECTRUM | | | | | | | | | | | |
| INSTALLED EQUIP. COST | | | | | | | | | | | |
| Thumb | \$ 42.0 | | | | | | | | | | |
| Fermi 2 | \$ 285.1 | | | | | | | | | | |
| <u>Overheads @ 21.6%</u> | <u>\$ 86.4</u> | | | | | | | | | | |
| SUBTOTAL | \$ 413.5 | | | | | | | | | | |
| UNDEPRECIATED VALUE | | | | | | | | | | | |
| Thumb | \$ 108.4 | | | | | | | | | | |
| <u>Fermi 2</u> | <u>\$ 164.8</u> | | | | | | | | | | |
| SUBTOTAL | \$ 273.2 | | | | | | | | | | |
| DISMANTLING COSTS | | | | | | | | | | | |
| Thumb | \$ 10.0 | | | | | | | | | | |
| Fermi 2 | \$ 5.0 | | | | | | | | | | |
| <u>Overheads @ 156.4%</u> | <u>\$ 23.5</u> | | | | | | | | | | |
| SUBTOTAL | \$ 38.5 | | | | | | | | | | |
| MISC. DE SALARIES | | | | | | | | | | | |
| | \$ 28.0 | | | | | | | | | | |
| <u>Overheads @ 156.4%</u> | <u>\$ 43.8</u> | | | | | | | | | | |
| SUBTOTAL | \$ 71.8 | | | | | | | | | | |
| RECURRING LEASE COSTS | | | | | | | | | | | |
| Thumb | \$ 12.6 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 |
| Fermi 2 | | | | | | | | | | | |
| NPV of LEASE COSTS | \$ 191.1 | | | | | | | | | | |
| TOTAL NPV | \$ 988.0 | | | | | | | | | | |

SPRINT PCS SPECTRUM RELINQUISHMENT COSTS-ORIGINAL VERSION

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|------------------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| SPRINT SPECTRUM | | | | | | | | | | | |
| INSTALLED EQUIP. COST | | | | | | | | | | | |
| Thumb | \$ 42.0 | | | | | | | | | | |
| Fermi 2 | \$ 272.8 | | | | | | | | | | |
| <u>Overheads @ 21.6%</u> | <u>\$ 83.1</u> | | | | | | | | | | |
| SUBTOTAL | \$ 397.9 | | | | | | | | | | |
| UNDEPRECIATED VALUE | | | | | | | | | | | |
| Thumb | \$ 88.0 | | | | | | | | | | |
| <u>Fermi 2</u> | <u>\$ 163.2</u> | | | | | | | | | | |
| SUBTOTAL | \$ 251.2 | | | | | | | | | | |
| DISMANTLING COSTS | | | | | | | | | | | |
| Thumb | \$ 10.0 | | | | | | | | | | |
| Fermi 2 | \$ 5.0 | | | | | | | | | | |
| <u>Overheads @ 156.4%</u> | <u>\$ 23.5</u> | | | | | | | | | | |
| SUBTOTAL | \$ 38.5 | | | | | | | | | | |
| MISC. DE SALARIES | | | | | | | | | | | |
| | \$ 28.0 | | | | | | | | | | |
| <u>Overheads @ 156.4%</u> | <u>\$ 43.8</u> | | | | | | | | | | |
| SUBTOTAL | \$ 71.8 | | | | | | | | | | |
| RECURRING LEASE COSTS | | | | | | | | | | | |
| Thumb | \$ 12.6 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 | \$ 14.7 |
| Fermi 2 | | | | | | | | | | | |
| NPV of LEASE COSTS | \$ 191.1 | | | | | | | | | | |
| TOTAL NPV | \$ 950.5 | | | | | | | | | | |

Microwave Relocation - Bad Actor Form

2/21/96

Incumbent Name: **Suffolk County Police**
Suffolk County Water Authority

Market / MTA: **New York**

Market freq. block: **B**

Number of paths required for initial system: **2**
 Estimated comparable cost per path: **\$210,000**
 Total estimated comparable cost: **\$420,000**

Number of paths requested by incumbent for relo: **13**
 A paths: **2**
 B paths: **2**
 C - F paths: **2**
 Non PCS paths: **7**

Per path cost requested by the incumbent: **\$4,000,000 for 13 Paths**

Additional payments requested by the incumbent: **\$18,000,000**

Total requested relocation cost by the incumbent: **\$22,000,000**

Chain of events:

| <u>Date</u> | <u>Action</u> |
|-------------|---|
| 9/20/95 | Initial meeting with Suffolk County. The County asked for systemic relocation of all paths and funds to build additional sites. Also, requested digital upgrade and cash payments beyond the replacement. |
| 10/5/95 | The County sent CSM a list of tower locations for the county's information manage services. |
| 10/10/95 | The County sent a fax to CSM that stated: " in return for the 2 GHz frequencies, Suffolk county requests a total digital microwave upgrade which includes all enhancement with all County Management Information Services. An additional revenue of \$18,000,000 must be included to consummate negotiations in a timely manor!!! |
| 10/27/95 | The county sent a fax to CSM detailing their relocation proposal. |
| 10/30/96 | Meeting with Suffolk County. The County again asked for systemic relocation of all paths and funds to build additional sites. Also requested digital upgrade and cash payments beyond the replacement. |
| 11/16/95 | The meeting revolved around discussion of the County's proposal. The County asked for a proposal from the PCS Licences. Suffolk County was given an initial term sheet with three proposals. CSM is representing STV and Omnipoint for Microwave relocation. STV and Omnipoint have two paths each. Proposal 1- Analog replacement of the STV and Omnipoint paths with 600 channel radios. Proposal 2- Systemic analog replacement of the incumbents six 1.9 paths. 2-STV 2-Omnipoint 2-C block Proposal 3- Digital replacement of the Omnipoint and STV paths with 16DS-1 radios. Relocation by April 15,1996. |
| 11/28/95 | The County found the term sheet unacceptable. |
| 2/21/96 | Continued contact with the Suffolk County Police has been unsuccessful in reducing their relocation expectation. |

**Negotiations Summary for
SUFFOLK COUNTY POLICE**

Client: STV
Negotiator: Kazie Drucker
Meeting Date: September 20, 1995
Meeting Attendees: Vincent Stile (Communications System Director)
 Gregory Certo (Communications Manager)
 Joseph Chiro (Chief Technician)
 Bill Gardner (System Operation Technician)
 Bob Donnelly (Communications Manager for County)
 Spike Schultheis (UTC Consultant, Mission Communications Group)

System Overview:

System is 13 paths total (incumbent says there are 21 paths total). Seven (15) paths are 2.1 GHz. Omnipoint is interested in three of these paths. STV is interested in one of these paths:

| Site 1 | Call sign | Freq. | Site 2 | Call sign | Freq. | PCS interest |
|-------------|-----------|-----------|--------------|-----------|-----------|--------------|
| Hauptauge | WNTD938 | 1935.0000 | 3rd Precinct | WEG578 | 1855.0000 | Omnipoint |
| Coram Hill | WEG581 | 1875.0000 | PDHQ Yaphan | WEG582 | 1935.0000 | Omnipoint |
| Majors Path | WEG576 | 1945.0000 | Suffolk Park | WEG577 | 1865.0000 | Omnipoint |
| Coram Hill | WEG581 | 1875.0000 | Hauptauge | WNTD938 | 1955.0000 | STV |

The incumbent has contracted with Spike Schultheis who is a UTC consultant. I have been involved with Mr. Schultheis on two other negotiations and in each instance he seems to lead the movement towards exorbitant premiums. In this instance, the Suffolk County Police are seeking a systemic relocation that includes the 2.1 Ghz paths as well as funds for additional paths they would like to build to currently unserved sites. They are insisting upon an upgrade from analog equipment that is over 15 years old to a digital DS-3 system, and a cash payment above and beyond the replacement system.

The suggested mechanism (proposed by Mr. Schultheis) is to offer co-location on Suffolk County Towers to any PCS licensee in exchange for what they are asking. There were some hostile people at the table who said that "to discuss an analog replacement and nothing else was an absolute waste of [their] time." I balked at what they were asking for and suggested that with the amounts they were seeking it was cheaper to engineer around their system. Additionally, I suggested in so many words that it was not beyond Omnipoint or Sprint to take cases that they believed were cases of price gouging to the FCC for review. I stressed the issues of interference and stated that my clients are not in any way responsible for the relocation of 2.1 paths or even 1.9 Ghz paths for which there is no interference.

With respect to the cash payment, the incumbent is waiting for an analysis from the UTC that will be ready by the end of next week that details the "value of the spectrum" and what they will seek as a cash payment.

Issues to address:

- In order to move forward with this incumbent, the PCS licensees must look at relocating the C block paths of which there are two. These paths are located between the interference paths and are all part of the backbone of the system.
- Omnipoint and Sprint should address whether or not they would like to co-locate on any of Suffolk County's towers. The County owns all of their towers and they are all less than 10 years old. They are designed to hold three times the amount of equipment that is currently on the towers, and thus could easily hold any PCS equipment.

Recommendation:

I carry the message back to the incumbent that my clients are not interested in relocating anything else but the 2 GHz paths. I stress that my clients may be interested in locating on the towers, but these are to be separate discussions and the means by which Suffolk County Police can find additional revenue for the relocation of their 2.1 paths. To show a level of compromise, I would suggest that we address the C block paths, but if they do not make great concessions and move off of their position, then this becomes a case to take to the FCC for price gouging, or we let them sit. They did indicate that they want to make this happen and move forward. I will also try and get their starting position in writing from them so that if we need to go to the FCC, we have some proof.

Next Steps:

- Katie Drucker to discuss with PCS licensees the issues regarding site acquisition and the C block paths.
- Katie Drucker will send the incumbent any current information on the C block auctions.
- The incumbent will send me a detailed map of their system that includes all pertinent information for site co-location.
- The incumbent will send me a pricing proposal as presented by the UTC.

COUNTY OF SUFFOLK



ROBERT J. GAFFNEY
COUNTY EXECUTIVE

PETER F. COSGROVE
POLICE COMMISSIONER

POLICE DEPARTMENT

10/05/95

Ms. Kathryn E. Drucker
Negotiations Manager
Suite 800
8300 Boone Blvd.
Vienna, VA 22182

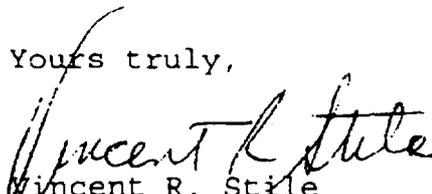
Re: Suffolk County's 2 GHz Spectrum

Dear Ms. Drucker:

The enclosed information is what we had promised to send you regarding Suffolk County's Police Microwave Network. Also included are locations that County Management Information Services has depicted by locations that are to be connected to the microwave network.

If you require any further information regarding the microwave network, please call Mr. Joseph Chiro or myself at (516) 852-6434.

Yours truly,


Vincent R. Stile
Police Communications
Systems Director

VRS:ec
encs.

Suffolk County Police Dept. Microwave Network

- 1) 1ST PCT
Route 109
Lindenhurst, NY
75 Ft. Monopole
Co-ordinates Lat 40 42 45 Long 73 22 22
Tx. Freq(s): 2139.600 MHz

- 2) 2ND PCT
Park Ave
Huntington, NY
40 Ft Monopole
Co-ordinates Lat 40 50 05 Long 73 21 47
Tx. Freq(s): 2191.2000 MHz

- 3) 3RD PCT
5th Ave./Wisconsin Ave.
Brentwood, NY 11706
Rohn Tower 130'
Co-ordinates: Lat 40 45 30 Long 73 15 48
Tx. Freq(s): 1855.000 MHz

- 4) 4TH PCT (North County Complex)
Old Willets Path
Hauppauge, NY
75 Ft Monopole
Co-ordinates Lat 40 49 38 Long 73 14 05
Tx. Freq(s): 2139.600 MHz

- 5) 5TH PCT
Waverly Ave
Patchogue, NY
75 Ft Monopole
Co-ordinates Lat 40 46 04 Long 73 01 34
Tx. Freq(s): 2184.800 MHz

- 6) 6TH PCT
Middle Country Road
Coram, NY
45 Ft Monopole
Co-ordinates Lat 40 52 27 Long 72 59 00
Tx. Freq(s): 2134.800 MHz

- 7) 7TH PCT
Flower Hill Drive & William Floyd Parkway
Shirley, NY
Co-ordinates Lat 40 49 40 Long 72 52 15

- 8) MT. MISERY
Mt. Misery Rd. (S. of Northern State)
Huntington, NY 11747
Rohn Tower 250'
Co-ordinates Lat 40 48 05 Long 73 26 02
Tx. Freq(s): 1895.000 MHz
2184.8000
2189.6009
- 9) Greenlawn Water Tower
Jericho Turnpike
Greenlawn, NY
Co-ordinates Lat 40 49 50 Long 73 21 13
Tx. Freq(s): 2134.800 MHz
2141.200
- 10) PC RICHARDS (HAUPP)
LIE N Service Rd, Exit 55
Hauppauge, NY 11788
Rohn Tower 360'
Co-ordinates: Lat 40 48 30 Long 73 13 20
Tx. Freq(s) 1935.000 MHz
1955.000
1975.000
- 11) STONY BROOK HOSPITAL
Nichols Road
Stony Brook
Roof of Hospital = 150 Ft.
Co-ordinates Lat 40 54 36 Long 73 06 55
- 12) CORAM HILL
Foxboro Rd. (off Berkshire Dr.)
Farmingville, NY 11738
Rohn Tower 110'
Co-ordinates: Lat 40 50 39 Long 73 01 58
Tx. Freq(s) 1855.000 MHz
1875.000
2184.800
- 13) YAPHANK (Police Headquarters)
30 Yaphank Ave.
Yaphank, NY 11980
Stainless Tower 225'
Co-ordinates: Lat 40 49 19 Long 72 55 10
Tx. Freq(s) 1935.000 MHz
1955.000
1985.000
2134.800
2138.000