PROPOSED SITE(S) LOCATION AND ADDRESS

Proposed site (Nelsonville) is located at 15 Rockledge Road, Nelsonville, NY.

Please reference table below for details and location information on the proposed site.

SUBJECT SITE INFORMATION

Site Name	Structure Type	AGL	Longitude	Latitude	Orientation
Nelsonville	Tree Pole Tower	110’	-73.940989	41.422311	18º, 160º, 260º

- *AGL = antenna height centerline above ground level*

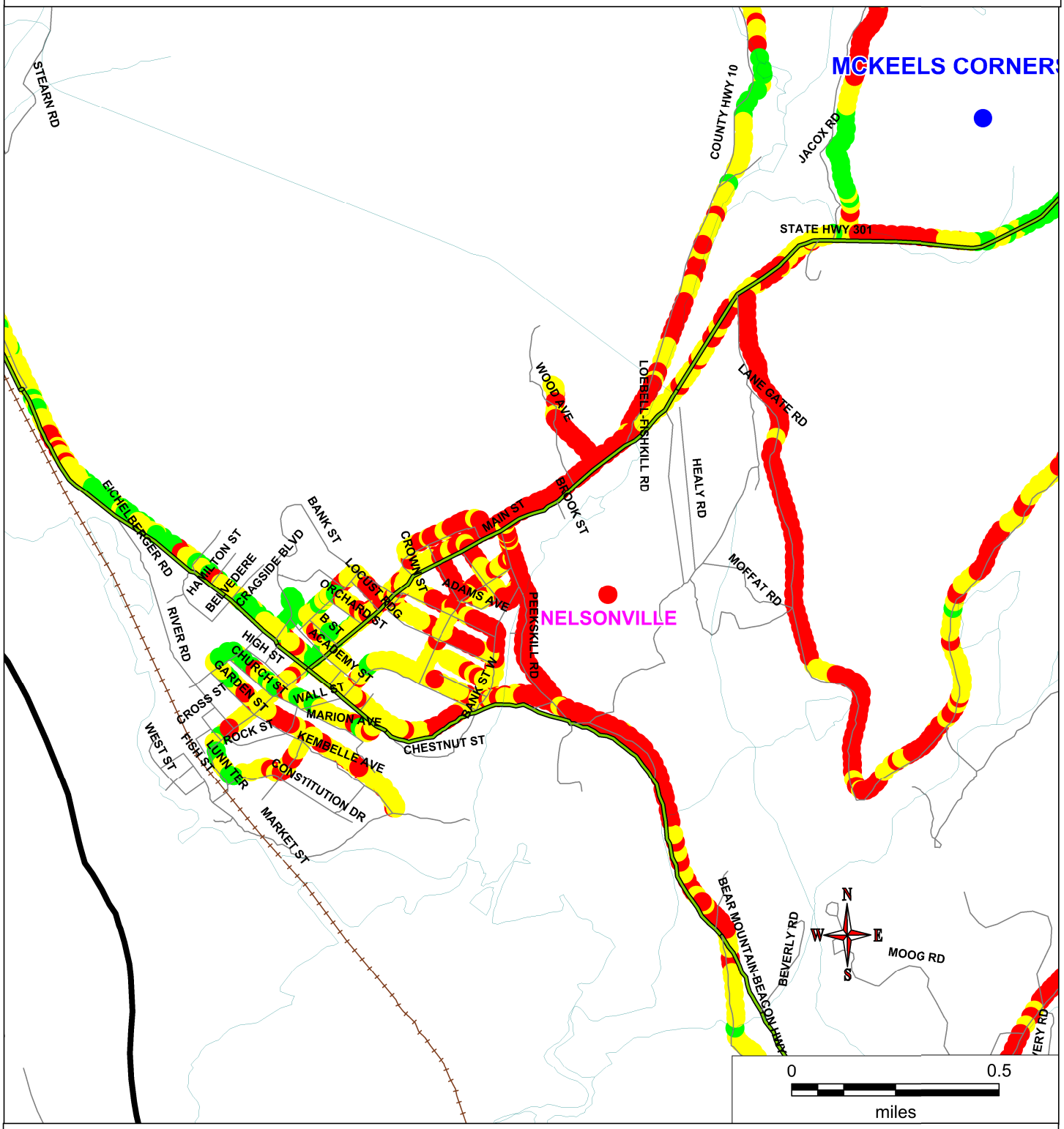
ADJACENT ON-AIR SITES

Site Name	Type	AGL	Longitude	Latitude	Orientation
McKeels Corners	Lattice	100’	-73.9235	41.43893	100º, 160º, 240º
West Point HD	Lattice	141’	-73.980700	41.389400	0º, 90º, 180º
West Point Campus	Stadium	116’	-73.965092	41.387586	0º, 90º, 180º
Fahnestock	Lattice	268’	-73.880461	41.431917	50º, 170º, 290º
Travis Corner	Tree Monopole	80’	-73.911822	41.378689	102º, 222º, 342º
North Highlands	Monopole	112’	-73.917406	41.470892	0º, 102º, 222º

Exhibit A
Existing 850 MHz 3G Drive Test Map

3G DRIVE TEST MAP

CDMA 3G - 850 MHz Band



Nelsonville (Subject Site)

On Air Site

Receive Channel Pilot Power (dBm)

110 dB OPL (-75 dBm) Reliable In-Building Coverage

120 dB OPL (-85 dbm) Reliable In-Vehicle Coverage

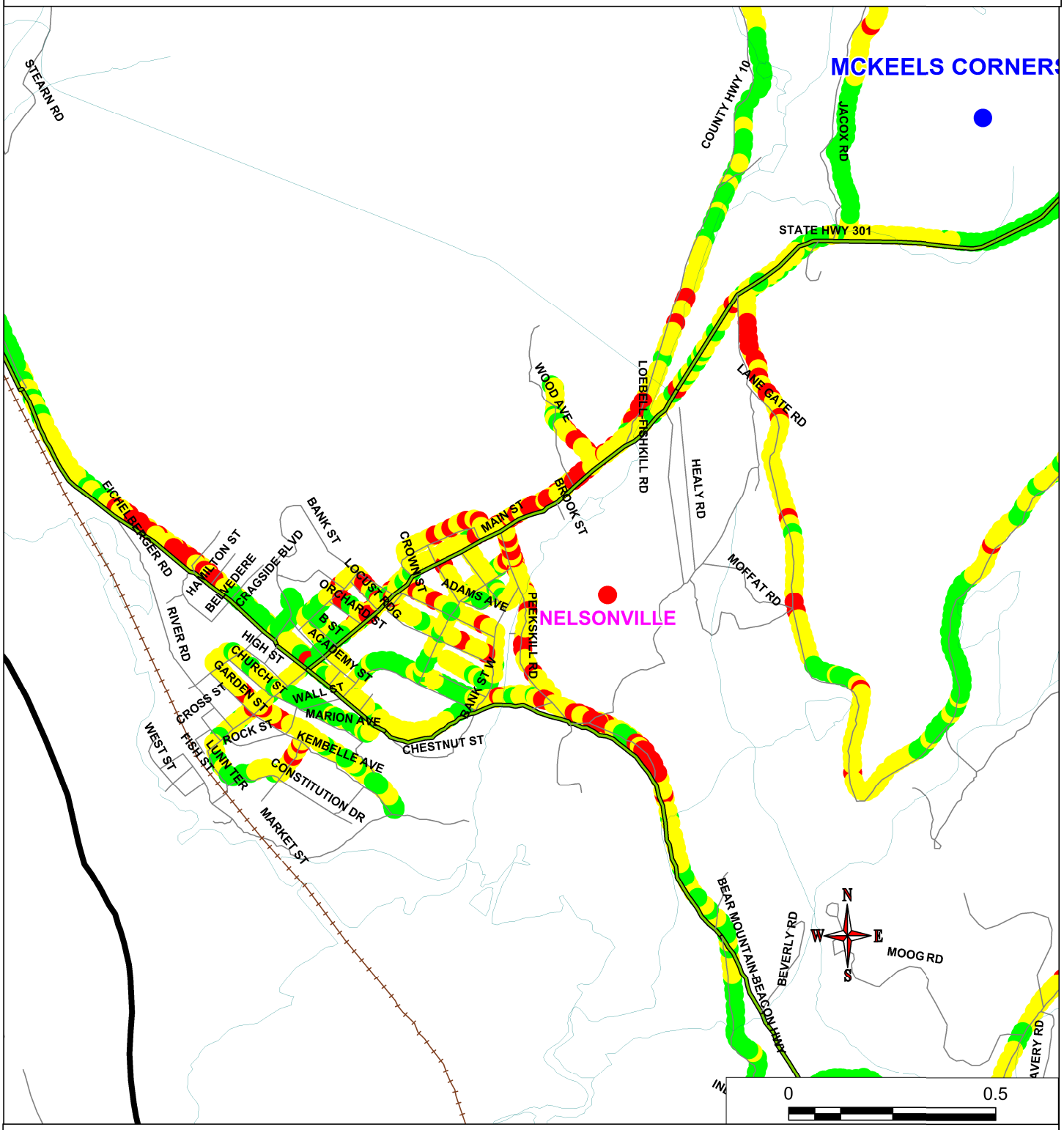
> 120 dB OPL

Date Driven: 12/15/2017
3G Drive Test Data w/scanner
Antenna Mounted Externally
5 dB Foliage Correction Utilized

Exhibit B
Existing 700 MHz 4G Drive Test Map

4G DRIVE TEST MAP

LTE 4G - 700 MHz Band



Nelsonville (Subject Site)

On Air Site

Reference Signal Receive Power (RSRP)

Reliable In-Building Coverage (x >= -95 dBm RSRP)

Reliable In-Vehicle Coverage (x >= -105 dBm RSRP)

UnReliable Coverage (x < -105 dBm RSRP)

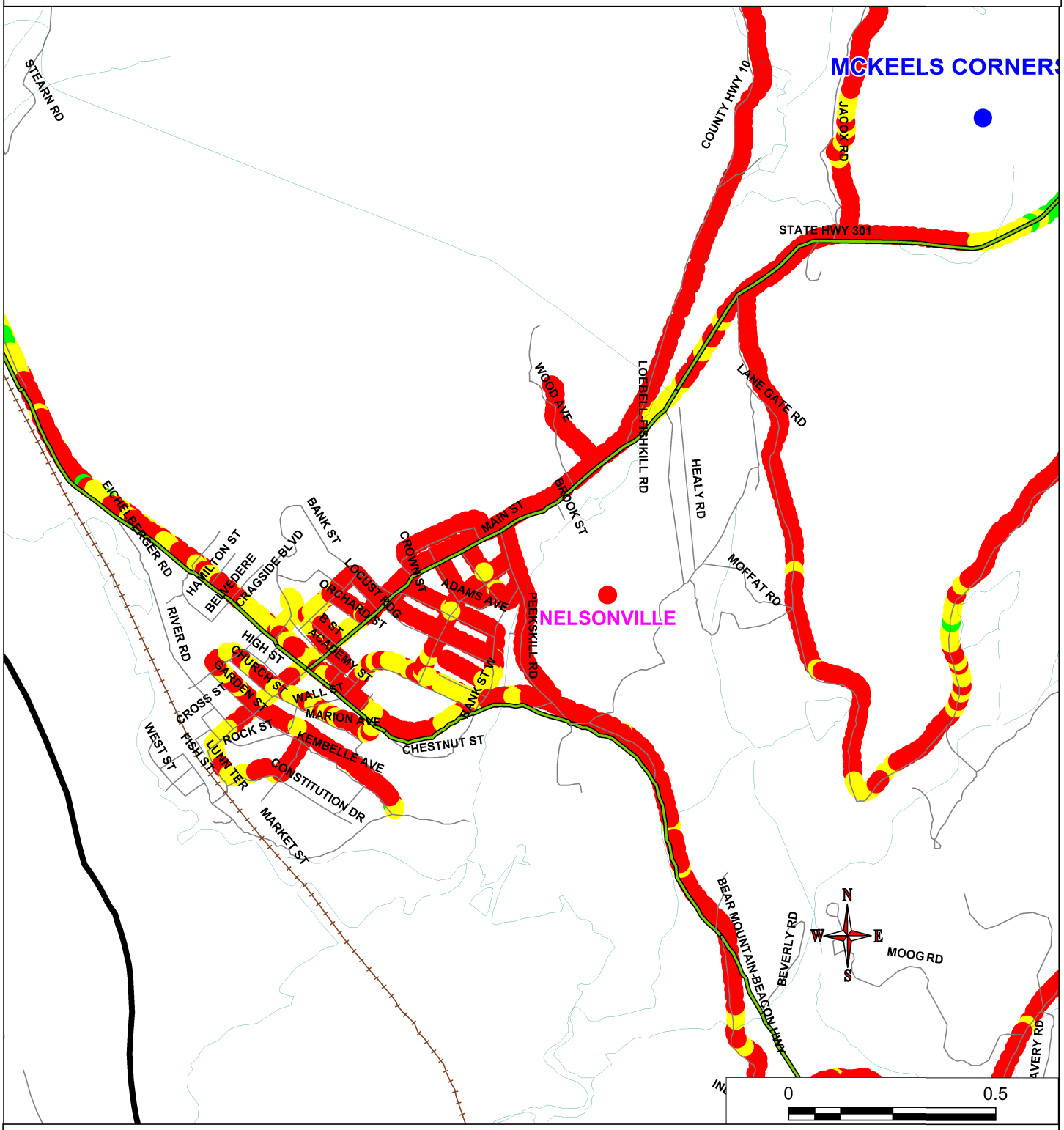
Date Driven: 12/15/2017
4G Drive Test Data w/scanner
Antenna Mounted Externally
5 dB Foliage Correction Utilized

Exhibit C

Existing 2100 MHz 4G Drive Test Map

4G DRIVE TEST MAP

LTE 4G - 2100 MHz Band



Nelsonville (Subject Site)

On Air Site

Reference Signal Receive Power (RSRP)

Reliable In-Building Coverage (x >= -95 dBm RSRP)

Reliable In-Vehicle Coverage (x >= -105 dBm RSRP)

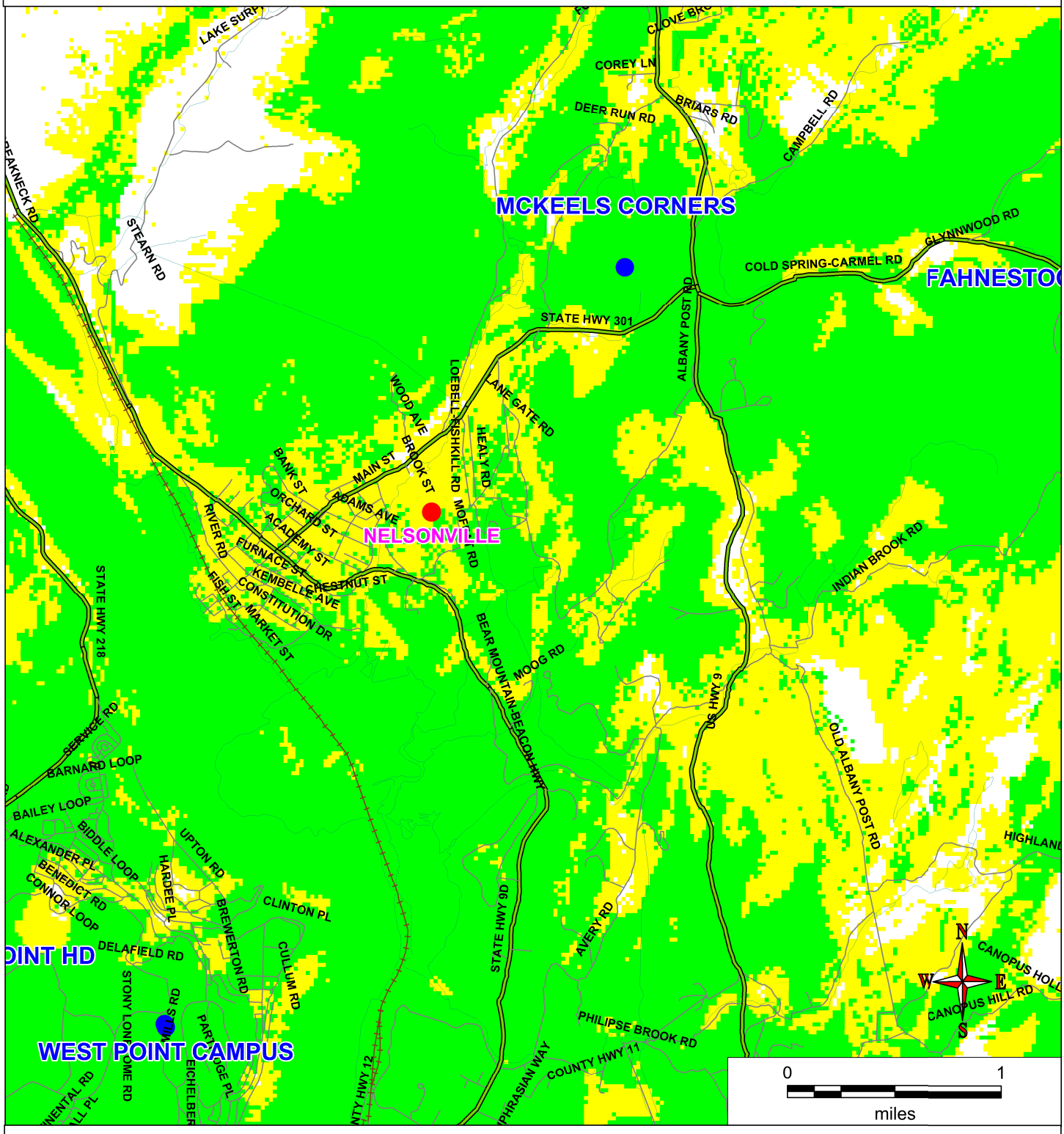
UnReliable Coverage (x < -105 dBm RSRP)

Date Driven: 12/15/2017
4G Drive Test Data w/scanner
Antenna Mounted Externally
5 dB Foliage Correction Utilized

Exhibit D
Verizon Wireless Existing 700 MHz LTE Coverage

700 MHz LTE EXISTING COVERAGE

LTE 4G - COVERAGE MAP (RSRP)



Nelsonville (Subject Site)

On Air Site

Reliable In-Building Suburban Coverage (>=-95 dBm RSRP)

Reliable In-Vehicle Coverage (>=-105 dBm RSRP)

Exhibit E
Verizon Wireless Existing & Proposed 700 MHz LTE Coverage

700 MHz LTE COMPOSITE COVERAGE (Existing & Subject Site @ 110')

LTE 4G - COVERAGE MAP (RSRP)

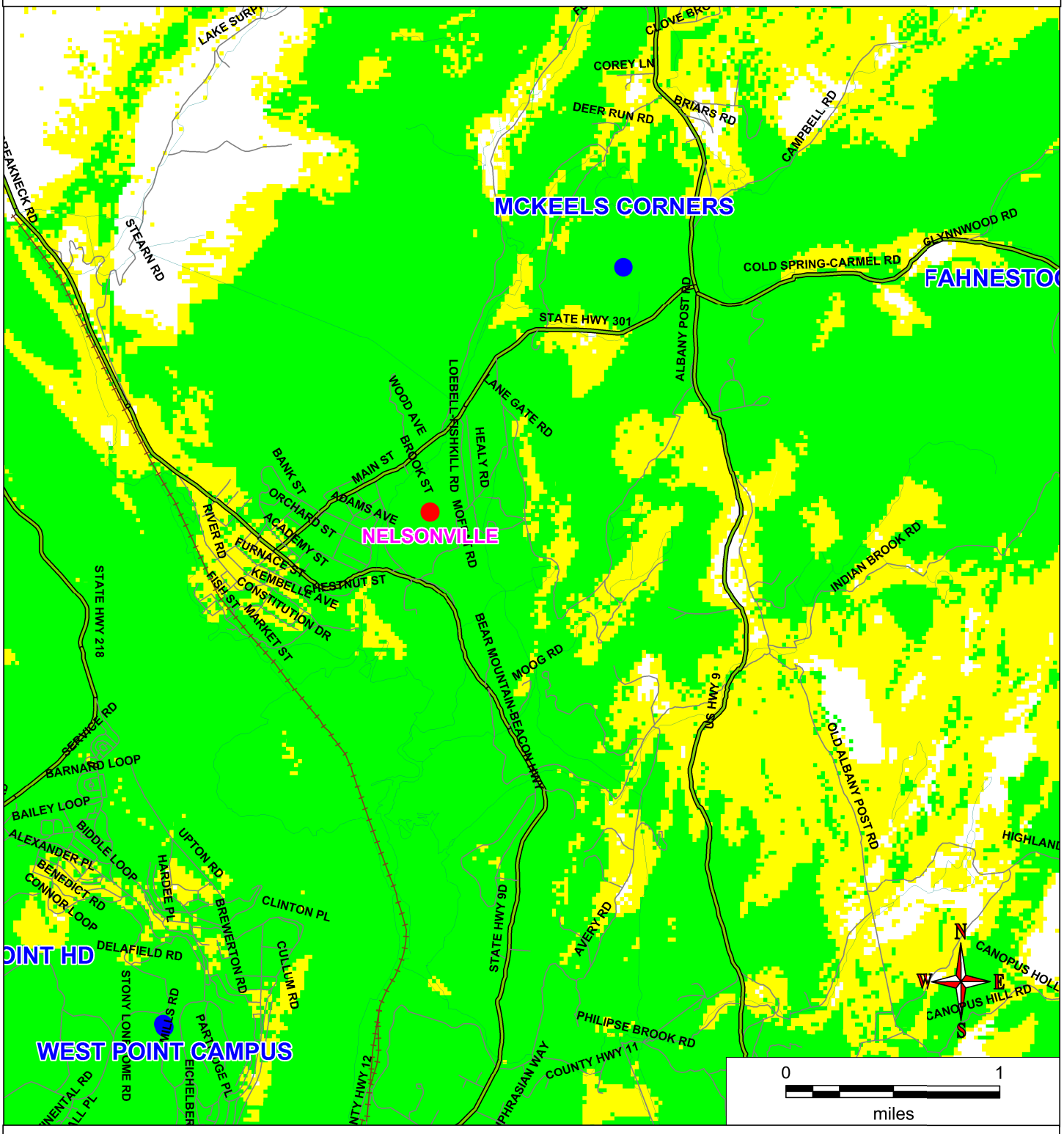
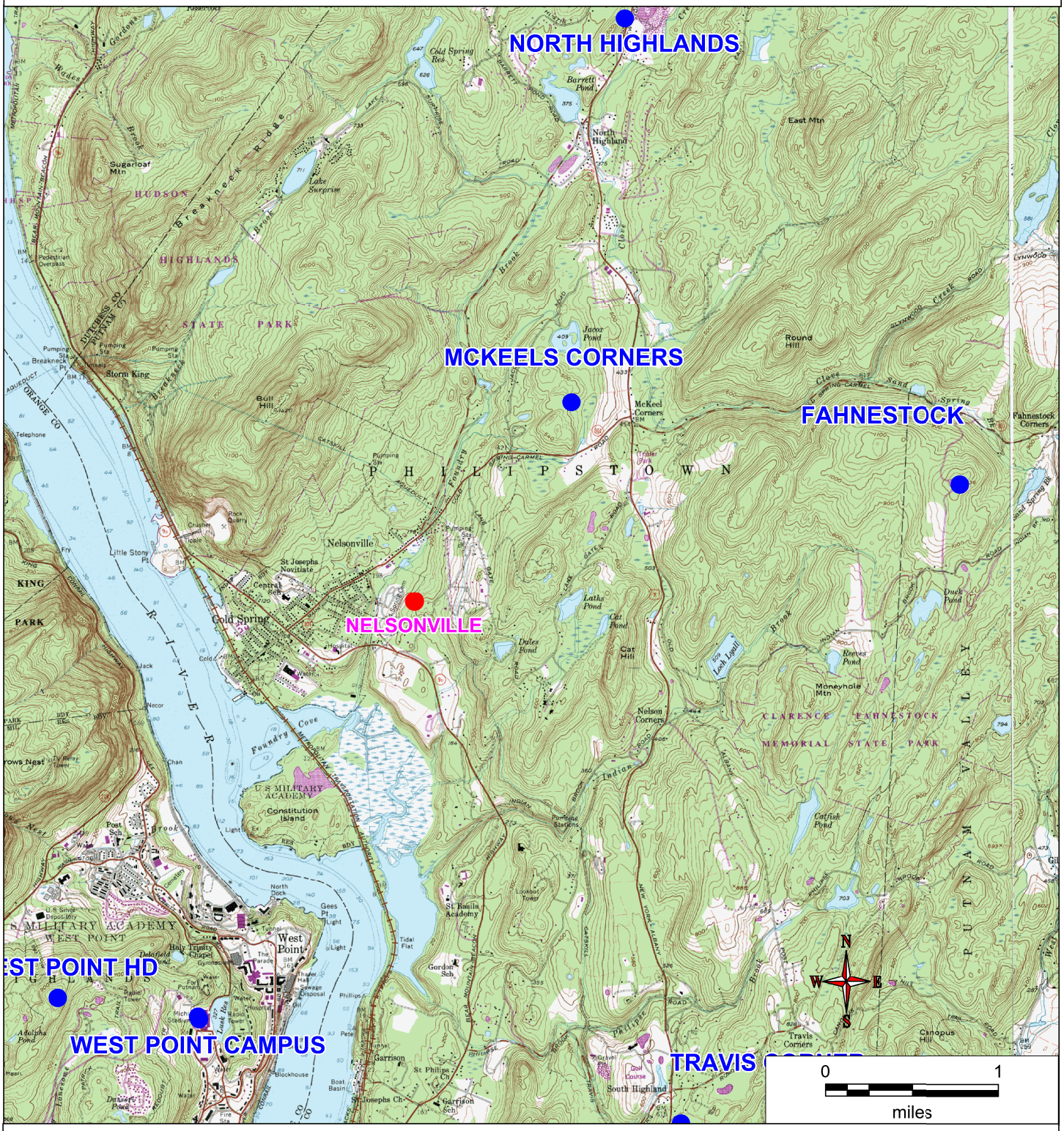


Exhibit F
Verizon Wireless Adjacent Site Map

VERIZON WIRELESS ADJACENT SITE MAP

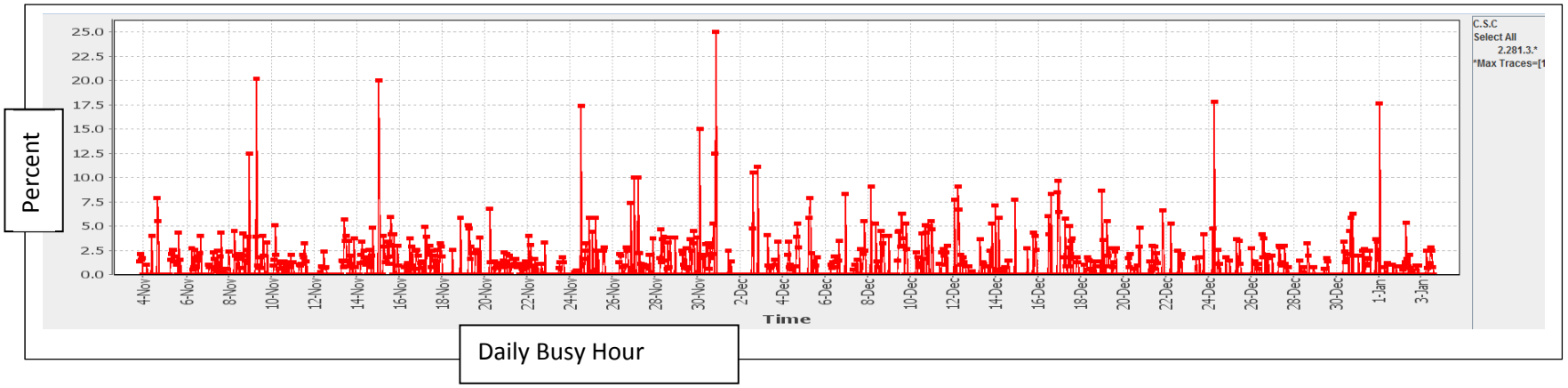


Nelsonville (Subject Site)

On Air Site

Exhibit G
3G Access Failure Rate Charts

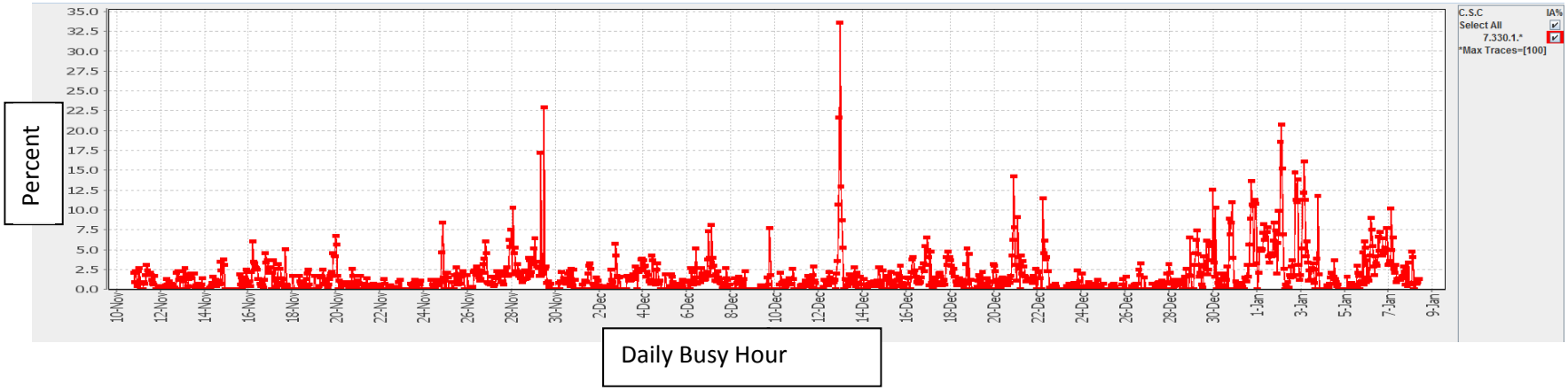
McKeels Corner's Gamma Sector (240º) – Access Failure Rate 850 MHz 3G Service



KPI access failure rate demonstrates over 2% for the entire time period reflected. Access failures as high as 25% were recorded.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

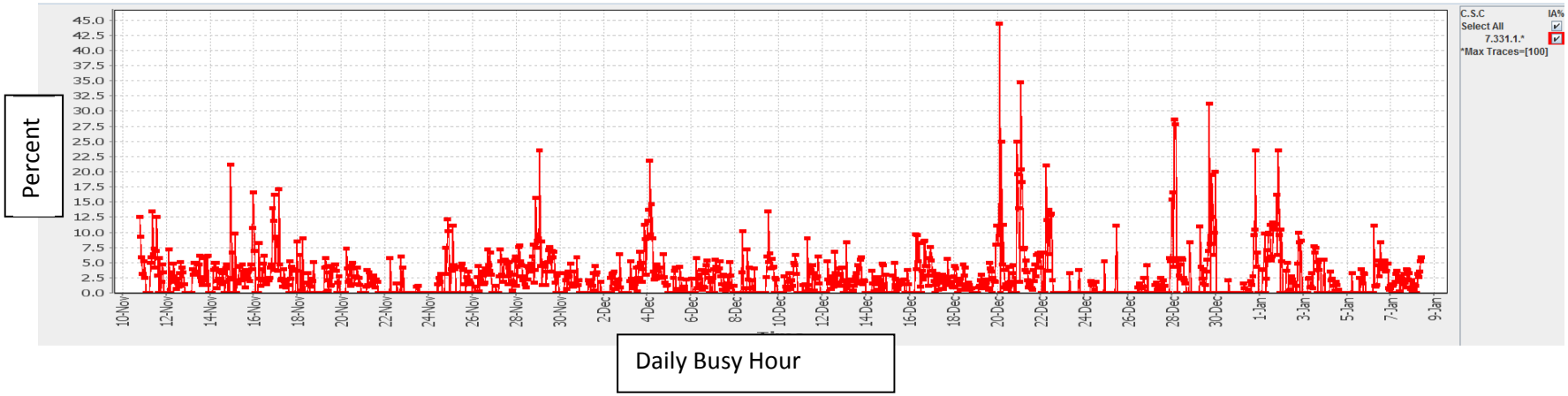
West Point Alpha Sector (0º) - Access Failure Rate 850 MHz 3G Service



KPI access failure rate demonstrates over 2% for a majority of the time period reflected. Access failures as high as 32% were recorded.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

West Point Campus (0º) - Access Failure Rate 850 MHz 3G Service

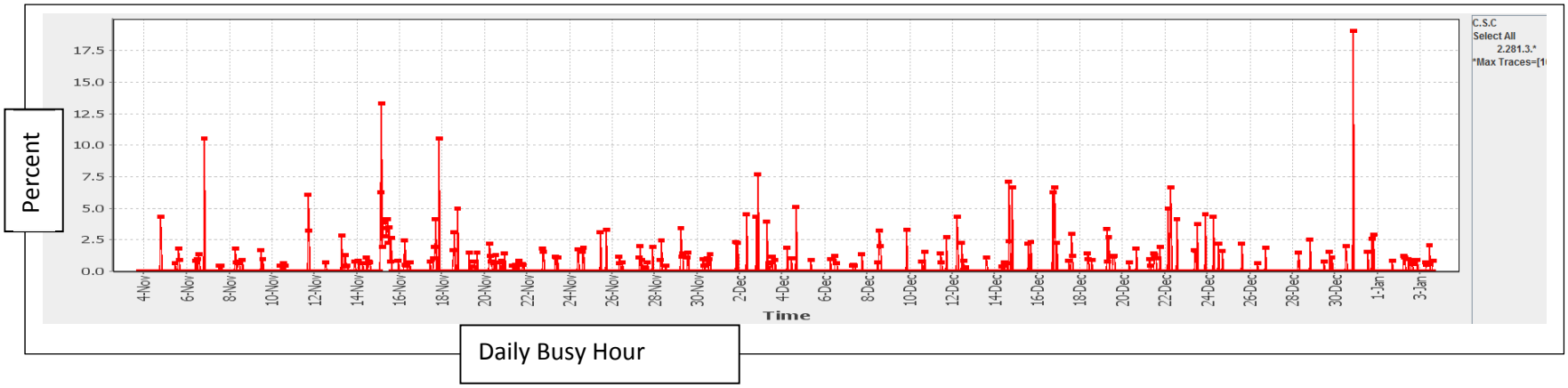


KPI access failure rate demonstrates over 2% for a majority of the time period reflected. Access failures as high as 42% were recorded.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

Exhibit H
3G Drop Failure Rate Charts

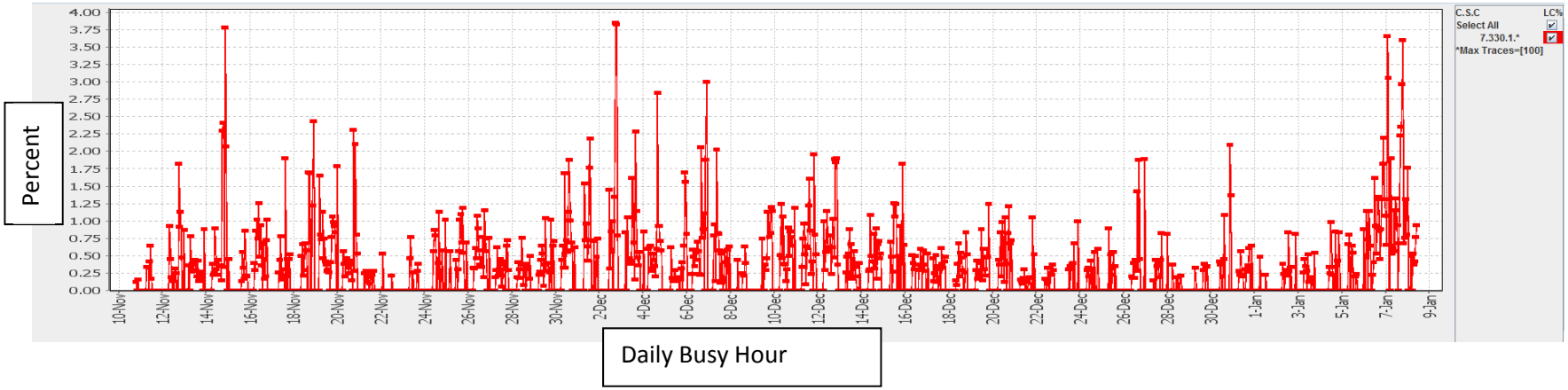
McKeels Corner's Gamma Sector (240º) – Drop Call Rate 850 MHz 3G Service



KPI Drop Call rate demonstrates over 1% for most of the time period reflected. Drop Calls as high as 17% were recorded.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

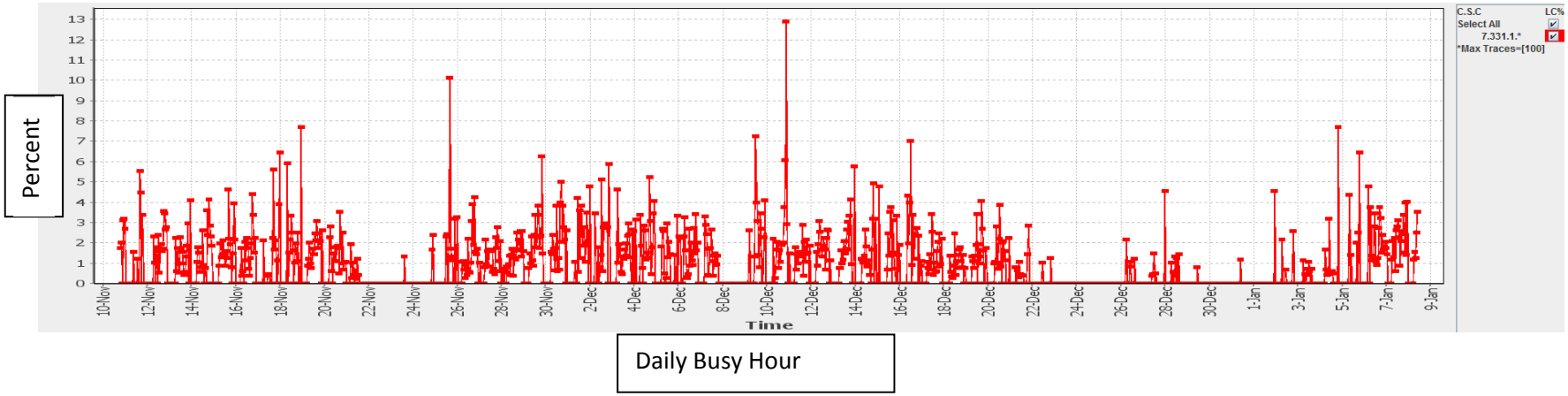
West Point Alpha Sector (0º) - Drop Call Rate 850 MHz 3G Service



KPI Drop Call rate demonstrates over 1% for a majority of the time period reflected. Drop Calls as high as 3.75% were recorded.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

West Point Campus (0º) - Drop Call Rate 850 MHz 3G Service



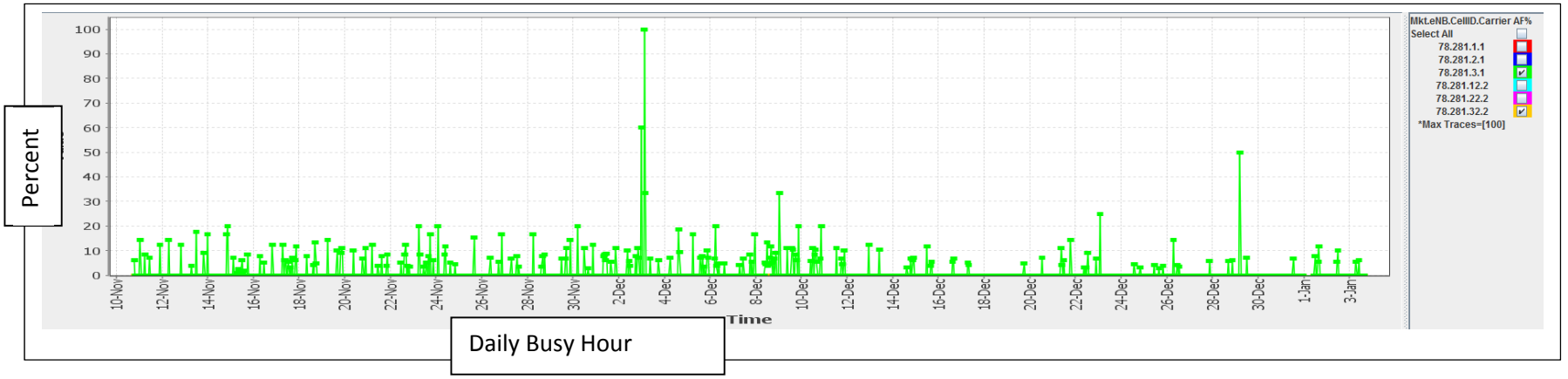
Daily Busy Hour

KPI Drop Call rate demonstrates over 1% for a majority of the time period reflected. Drop Calls as high as 13% were recorded.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

Exhibit I
4G Access Failure Rate Charts

McKeels Corner's Gamma Sector (240º) – Access Failure Rate 4G Service (700 MHz & 2100 MHz)

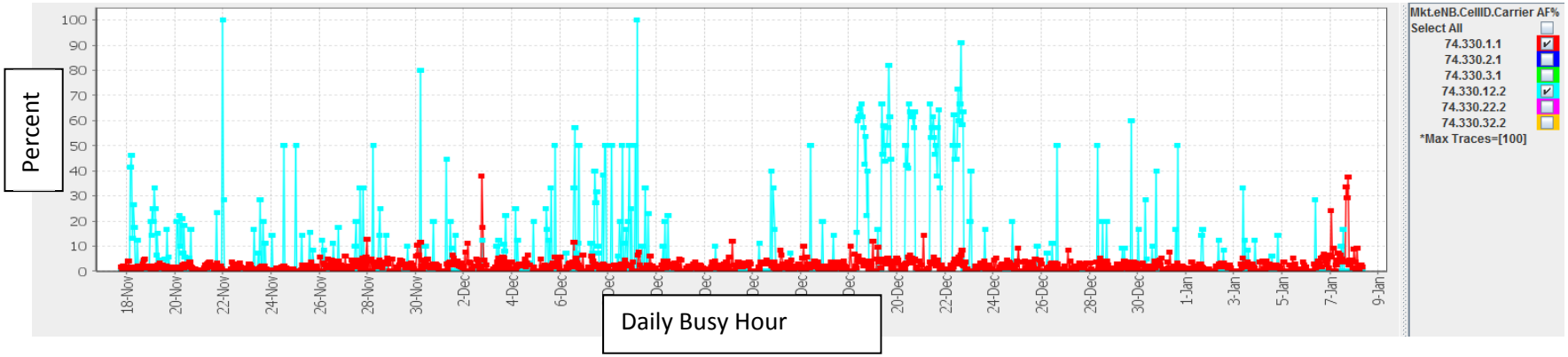


KPI access failure rate demonstrates over 2% for the entire time period reflected. Access failures as high as 60% were recorded.

- Green data points represent 700 MHz LTE
- Yellow data points represent 2100 MHz LTE (No traffic setup on 2100)

Daily Busy Hour – 2 Month data from November 2018 to January 2019

West Point Alpha Sector (0º) - Access Failure Rate 4G Service (700 MHz & 2100 MHz)

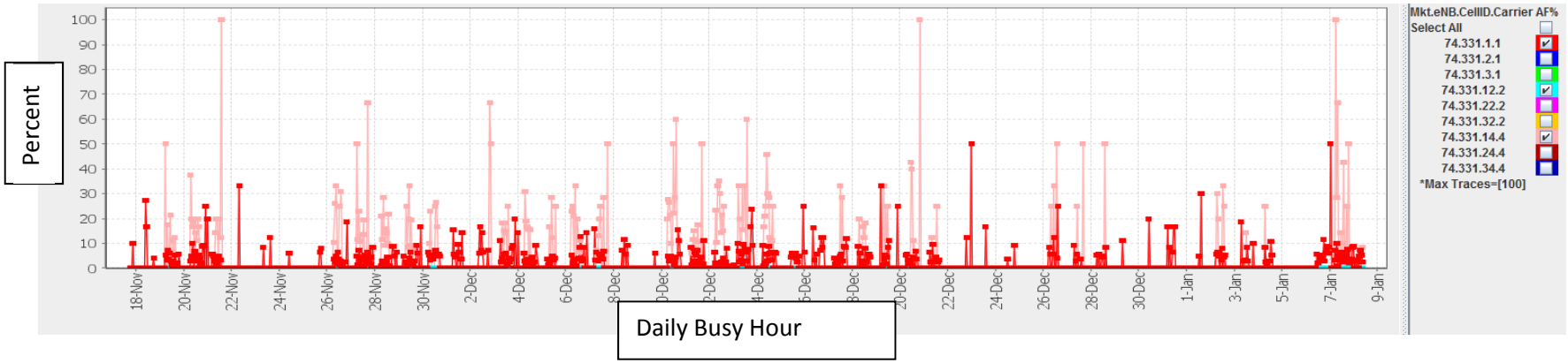


KPI access failure rate demonstrates over 2% for a majority of the time period reflected.

- Red data points represent 700 MHz LTE ~ Access failures as high as 30% reported.
- Blue data points represent 2100 MHz LTE ~ Access failures as high as 100% reported.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

West Point Campus (0º) - Access Failure Rate 4G Service (700 MHz & 2100 MHz)



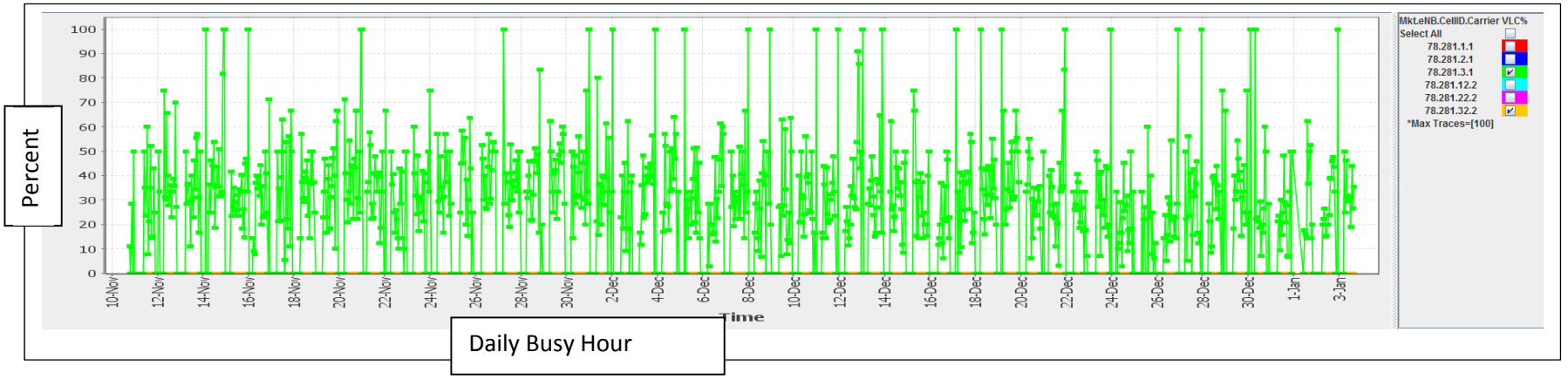
KPI access failure rate demonstrates over 2% for a majority of the time period reflected.

- Red data points represent 700 MHz LTE ~ Access failures as high as 30% reported.
- Pink data points represent 2100 MHz LTE ~ Access failures as high as 50% reported.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

Exhibit J
4G Drop Failure Rate Charts

McKeels Corner's Gamma Sector (240º) – Drop Failure Rate 4G Service (700 MHz & 2100 MHz)

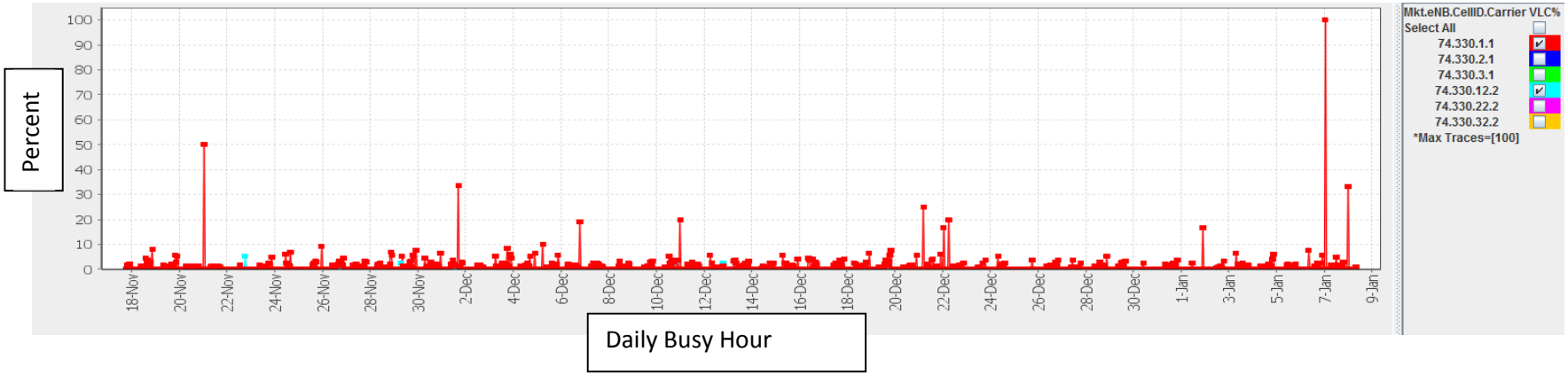


KPI Drop failure rate demonstrates over 1% for the entire time period reflected. Drop failures as high as 100% were recorded.

- Green data points represent 700 MHz LTE
- Yellow data points represent 2100 MHz LTE (No traffic setup on 2100 MHz)

Daily Busy Hour – 2 Month data from November 2018 to January 2019

West Point Alpha Sector (0º) - Drop Failure Rate 4G Service (700 MHz & 2100 MHz)

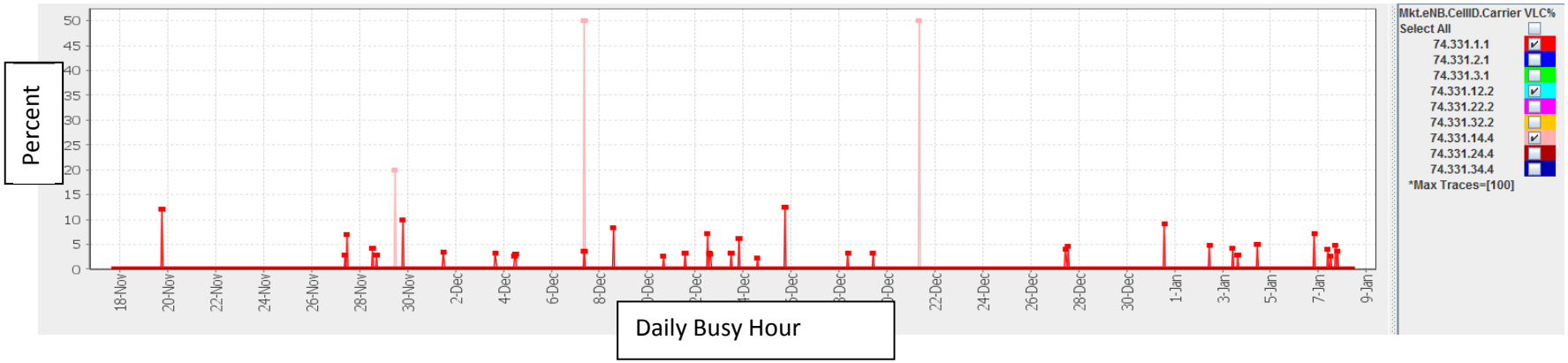


KPI Drop failure rate demonstrates over 1% for a majority of the time period reflected.

- Red data points represent 700 MHz LTE ~ Drop failures as high as 90% reported.
- Blue data points represent 2100 MHz LTE ~ Drop failures as high as 5% reported.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

West Point Campus (0º) - Drop Failure Rate 4G Service (700 MHz & 2100 MHz)



KPI Drop failure rate demonstrates over 1% for a majority of the time period reflected.

- Red data points represent 700 MHz LTE ~ Drop failures as high as 12% reported.
- Pink data points represent 2100 MHz LTE ~ Drop failures as high as 50% reported.

Daily Busy Hour – 2 Month data from November 2018 to January 2019

Appendix 1: Curriculum Vitae

PierCon Solutions L.L.C.
Specialists in Wireless Systems

Richard A. Conroy, Jr.

SUMMARY

Richard A. Conroy Jr. has over twenty-nine years of engineering and executive experience in the wireless communications industry.

Prior to co-founding PierCon Solutions LLC in 1998, Mr. Conroy was employed by Wireless Systems Consulting (WSC) as the Director of Engineering Operations. At WSC, Mr. Conroy was responsible for the design and implementation of New York's first all digital Personal Communications System (PCS). Mr. Conroy provided Engineering Management, design, process development, testing guidelines and expert testimony for Omnipoint Communications.

Prior to his roles at WSC and Omnipoint, Mr. Conroy was employed by Motorola Communications where he held positions of Account Manager, Senior Systems Engineer and Lead Engineer for Motorola Communications & Electronics, Inc.

Mr. Conroy holds a Bachelor of Science degree in electrical engineering from New Jersey Institute of Technology; as well as additional training from Motorola, Wireless Systems Consulting, Ericsson, Nortel, Omnipoint & T-Mobile including the following: System Integration Institute, Presenting Technical Information to Customers, Needs Analysis, Managing Technical People, SmartZone, Trunked Simulcast Systems, Secure Communications, Analog and Digital Microwave Design, Dispatch Center Design, ESMR / TDMA, GSM, and CDMA.

Mr. Conroy has been accepted as an expert in the field of RF Engineering and testified in federal court in New Jersey & California. As a technical consultant with a solid background in wireless theory and design, Mr. Conroy specializes in providing all aspects of wireless system design, implementation, and project management.

STRENGTHS

- Business Development
- Project Management
- Managing multiple cross-disciplined teams
- MS Project expert
- MS Access
- Implementation
- Cutover Plans
- Process Mapping
- Expert Testimony & Public Presentations
- Land Mobile Radio Systems
- Radio Coverage Standards
- Strategic Planning
- IP Networking / Subnetting
- LAN / WAN system planning
- WiFi / WiMAX
- Microwave Design
- GSM RF Design & Optimization
- Cell Site Testing & Planning
- Tools: RF Prediction - Excalibur, Odyssey, Comsite, Aircomm Asset;

CORPORATE HEADQUARTERS
63 Beaver Brook Rd., Suite 201
Lincoln Park, NJ 07035
973-628-9330 phone 973-628-9321 fax

- Optimization Network / Performance – OptPcs -Metrica KingFisher – AIMS – Nortel CPT analyzer - NERF
- TEMS
- MapInfo
- Technical Platforms: S18000-S12000-S8000-S2000 (Nortel) PCS Digital
- Cellular System GSM. RBS2102 (Ericsson)
- RF Zoning / FCC-FAA Compliance

RELEVANT EXPERIENCE

PierCon Solutions **(1998 – Present)**
Senior RF Engineer, President/Co-Owner

- Responsible for business development, growth and stability of PierCon Solutions.
- Responsible for providing technical consulting services to clients in the wireless industry.
- Provide all aspects of wireless System Design, Implementation and Project Management.
- Responsible for technical delivery on all major projects within PierCon Solutions.
- Expert Testimony provided for T-Mobile, Verizon Wireless, Sprint PCS, Nextel and AT&T Wireless before local zoning & planning boards for the approval of wireless sites. Testimony provided for hundreds of facilities.
- Testified in Federal Court of NJ and CA.
- Managed team of engineers performing unlicensed microwave system design for T-Mobile throughout NYC market.
- Responsible for the design of the Sprint PCS CDMA network for the NYMTA from search ring release to site commissioning. Defined link budget, issue search rings, evaluate candidates, perform design visits, develop antenna system designs, site prediction utilizing Planet, drive test evaluation and expert testimony. Solid background in CDMA theory and design.
- System needs analysis, design and specification document for numerous local police, fire public safety communication and computer networks.
- Design and facilitate temporary public safety dispatch facilities in anticipation of 9-1-1 and new system cutover.
- Design analog, digital, conventional and trunked public safety radio systems in all four public safety bands.
- Implementation project management and acceptance testing.
- FCC licensing, implementation & cutover plan.

Wireless Systems Consulting, Inc. **(1996 – 1998)**
Consultant, Director of Engineering Operations

Client - Omnipoint Communications

- RF Manager for Manhattan, Brooklyn and Queens.
- Team Leader responsible for the design and implementation of Northern New Jersey.
- Design and Implementation of Omnipoint's 1900 MHz GSM PCS system.
- Lead team of RF Engineers
- Perform RF Expert testimony in front of boards of adjustment and planning boards within New Jersey & New York.
- RF Team Leader for the Region 5, New Jersey RF Design.
- Developed standard operating practices, procedures and processes.
- Lead in development of Omnipoint's corporate wide site management database.
- Performed detailed in-building fiber optic distribution design proposals.

- Implemented in-building fiber optic PCS systems.
- Developed spread spectrum microwave designs
- Develop long and short term system RF design plan.
- Responsible for developing Grid and Frequency Plan.
- Develop Optimization Plans.

Motorola, Inc. (1988 – 1996)

Lead Engineer / Project Engineering Manager (1992-1996) (Eastern Division, Glen Rock, NJ)

- Responsible for managing an engineering team that designed and implemented the NYPD radio system enhancement and E9-1-1 project.
- Responsible for the overall project engineering effort of country's largest E9-1-1 system.
- Managed/ authored the test and troubleshooting process.
- Managing the field engineering implementation teams.
- Customer interface for engineering issues.
- Developed detailed schedules and plans for complex audio routing designs.
- Coordinated efforts between Engineering, Product Groups, Deliverables and Staging.
- Directed field engineering with regards to project priorities and goals.
- Awarded Motorola's Eastern Division Salesman of the Year (1995).

Senior Systems Engineer (1994 – 1995) (Southern Division, Columbia, SC)

- Provide engineering and technical support for the Southern Division.
- Responsible for the design of complex communication systems ranging from analog trunking systems to emerging digital technologies.
- Responsible for design and implementation of statewide SmartZone trunking System.
- Responsible for design of 6 site Astro Simulcast system for Charleston County FD
- Developed Corporate wide accepted MOSCAD technical proposal document.
- Designed 19.2 Mobile Data System.
- Performed Customer needs assessment training to division sales team.

Systems Engineer (1992 – 1993) (Southern Division, Atlanta, GA)

- Managed the presale design of a multi-state MIRS system.
- Responsible for developing the first private ESMR system using Motorola's MIRS (TDMA) technology. Interface between RF and Switch engineers during design phases.
- Managed radio TDMA coverage prediction based on high elevation / high ERP.
- Developed and assigned TDMA RF coverage parameters.
- Developed (TDMA) ESMR technical proposal.
- Designed Hybrid digital/analog 800 MHz (6 site) simulcast public safety trunking system.
- Awarded Peak Performer 1993 of Motorola's Southern Division.

Systems Engineer (1988 – 1992) (Glen Rock, NJ)

- System Engineer responsible for the design of wireless systems
- Experience in the following system designs and implementation: RF point to point links, Analog and Digital Microwave design and implementation, Data System design Coverage prediction, Two-way repeater systems and Trunked radio systems.

INDUSTRY SKILLS

- Technology expert – LTE, CDMA, GSM, WiMAX, P25, Public Safety
- Computer propagation and optimization tools: Planet EV, DB Planner, Odyssey and Asset, EDX Signal Pro, Excalibur, MOSAIC, PlotworX, Ericsson's TEMS & FICS,
- GIS mapping tools such as MapInfo, Terrain Navigator, Streets & Trips and Street Atlas.
- Drive testing tools: Agilent, Grayson & MLJ Drive Testing Tools
- FCC Office of Engineering Technology Bulletin 65.
- TSB88
- Microsoft Office: Excel, Word, Visio, Power Point, MS Project

EDUCATION

- BS – Electrical Engineering – New Jersey Institute of Technology, Newark, NJ

TRAINING

- Antenna Design Seminars – Georgia Technical Institute, Atlanta, GA
- Lucent CDMA training course material
- Management and Communication Seminars
- M/A-COM Public Safety Training
- R56 Bonding and Grounding – Motorola
- Consultant's Training – Motorola
- System Integration Institute
- Presenting Technical Information to Customers
- Secure, Astro Conventional & Astro Systems Training
- Sales Training program
- Dispatch Console Design
- Advanced Microwave Design
- Simulcast Design
- Trunked Systems Design