STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:
APPLICATION OF T-MOBILE NORTHEAST, LLC FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A TELECOMMUNICATIONS TOWER FACILITY AT 232 SHORE DRIVE IN OLD LYME, CONNECTICUT

DOCKET NO. 391

January 20, 2010

INTERVENOR NEW CINGULAR WIRELESS ("AT&T)
RESPONSES TO SITING COUNCIL
PRE-HEARING INTERROGATORIES SET ONE

Q1. What is New Cingular Wireless PCS, LLC's (AT&T) existing signal strength in the area that would be covered by the proposed facility?

A1. AT&T's existing signal strength in the proposed coverage area is in the -82 dBm to the mid -90 dBm range.

Q2. What is the minimum signal level AT&T would consider acceptable for service in the vicinity of the proposed site?

A2. AT&T's minimum signal level threshold in the proposed coverage area is -74 dBm or better as this area is densely populated and includes portions of the railroad.

Q3. What is the minimum signal level that AT&T requires in order to provide adequate in-vehicle coverage? What is the minimum signal level that AT&T requires in order to provide adequate in-building coverage?

A3. AT&T requires -82 dBm for reliable in-vehicle coverage and -74 dBm for reliable in-building coverage.

Q4. At what height would AT&T center its antennas on the proposed tower? How many antennas would be installed? How would the antennas be mounted, e.g. T-arm, low-profile platform, etc.?

A4. AT&T has a need for 110' but is aware, however, that T-Mobile has applied for a 100' monopole. Further, Verizon has proposed taking the 90' height on the proposed tower. T&T proposes to locate six (6) panel antennas at 110' AGL (centerline). Low profile

mounts are proposed. Comparative plots at 110', 90' and 80' are included as Attachment 1.

Q5. Provide the distance and direction from the proposed site to the existing (or proposed) sites that the proposed tower would interact with. Also include the addresses, tower heights, antennas heights and tower types (e.g. monopole).

A5.

AT&T Site ID	Address	City	Centerline height (AGL)	Structure height (AGL) and type	Distance & direction from proposed site
CT2235	125 Mile Creek Road	Old Lyme	136'	170' Monopole	1.2 miles northwest
CT2196	38 Hatchetts Hill	Old Lyme	165'	190' Monopole	1.8 miles northwest
CT5216	15 Liberty Way	East Lyme	62'	Rooftop	2.6 miles northeast
S2285	49 Brainerd Road	East Lyme	170'	Monopole	3.2 miles north-northeast

Q6. Would flush-mounted or T-arm-mounted antennas provide the required coverage? Would either configuration result in reduced coverage and/or necessitate greater antennas height? Explain.

A6. T-arms would provide the required coverage. Flush mounted antennas would require one additional level of antennas on the monopole in order to accommodate the proposed AT&T antennas.

Q7. Would AT&T provide cellular coverage initially and then PCS service later? Explain.

A7. Yes. AT&T's licensed operating frequencies in this part of the state include the 850 MHz ("cellular") band, specifically 880-894 MHz, as well as the 1900 MHz ("PCS") band. Initially AT&T will install 850 MHz cellular service and expand to the 1900 MHz PCS service to provide additional capacity as needed.

Q8. Provide existing and proposed coverage plots assuming AT&T's antennas are centered at their proposed height, ten feet lower, and twenty feet lower, respectively.

A8. The requested coverage plots are included as Attachment 1 and include modeled heights of 110', 90', 80' as T-Mobile would be at 100'.

Q9. Provide the individual lengths of the coverage gaps (in miles) for the roads that AT&T seeks to provide coverage to. Describe criteria and parameters in determining the lengths of the road.

A9. The coverage gaps experienced on Route 156 are approximately 2.5 miles at signal levels lower than -82 dBm. Signal strength less than -82 dBm is considered inadequate for reliable in-car service. This gap in coverage also includes other local roads and the railroad.

Q10. Provide the individual lengths of coverage (in miles) that would be provided by the proposed facility on the roads that AT&T seeks to provide coverage to. Provide similar data assuming the tower is ten feet shorter and twenty feet shorter, respectively.

A10. Antennas at a height of 110' at the proposed location will provide 2.3 miles of coverage along Route 156 at or greater than -82 dBm. Additional information regarding the lower heights is still being obtained at this time and AT&T will submit same as soon as available.

Q11. Provide the areas (in square miles) that would be covered by this facility assuming that AT&T's antennas are centered at the proposed height, ten feet shorter, and twenty feet shorter, respectively.

A11. AT&T's coverage in square miles as provided by antennas at differing heights is included below. As T-Mobile proposes to occupy the 100' level, the estimates for 110', 90' and 80' levels are would be as follows:

Antenna Height	Square miles of Coverage at -74dBm	Square miles of Coverage at -82 dBm
110'	8.4	9.2
90'	4.1	4.9
80'	2.8	3.5

Q12. Provide the following information: number of channels per sector for each antenna system that would be installed on the proposed tower, ERP per channel for each antenna system, and frequency at which each antenna system would operate. Also, provide a power density analysis of AT&T's proposed antennas to determine the worst-case percent maximum permissible exposure at the tower base.

A12. Included as attachment 2 please find a January 6, 2009 Power Density Calculation for Antennas on a Proposed Tower at 232 Shore Road, Old Lyme, Connecticut including the requested information.

Q13. Is AT&T familiar with the proposed SBA Towers II LLC facility at 14 Cross Lane, Old Lyme? If AT&T co-located at this facility, could it provide adequate coverage to the target area that AT&T seeks to cover via the 232 Shore Road tower site? Explain.

A13. AT&T is aware of this location and the proposed facility. That facility could provide reliable coverage for the target area. Similar coverage for AT&T could be achieved with antennas placed at a height of 140'. Please see coverage plots included in Attachment 3.

Q14. Would AT&T install an equipment shelter and/or locate its equipment on an equipment pad? Provide the dimensions of the shelter and/or pad.

A14. Unmanned equipment used to operate AT&T's antennas will be installed within a 12' by 20' radio equipment shelter that will be constructed within the proposed Facility compound.

Q15. Would AT&T have backup power at its tower site? How would backup power be provided, e.g. battery, diesel generator, etc.? Has AT&T considered using a fuel cell as a backup power source for the proposed facility? Explain.

A15. AT&T's proposed backup/emergency power relies on battery backup and a mobile diesel generator. A permanent diesel generator could be used at the site in the future if space exists and AT&T deploys same. AT&T does not have plans to use fuel cells at this location or others in the near future.

Q16. If a generator or fuel cell is to be used as a backup power source, would AT&T meet all applicable noise standards at the subject property boundaries?

A16. Yes, AT&T's generator would meet all applicable noise standards at the subject property boundaries.

CERTIFICATE OF SERVICE

I hereby certify that on this day, an original and twenty copies of AT&T's responses to Siting Council's interrogatories were served on the Connecticut Siting Council by electronic mail and hand delivery as well as delivery to the following:

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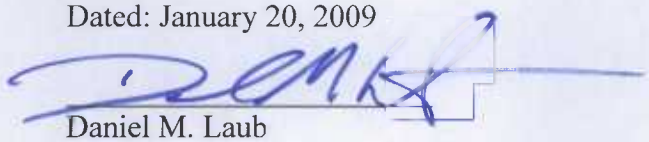
Hon. Timothy C. Griswold
First Selectman
Town of Old Lyme
52 Lyme Street
Old Lyme, CT 06371

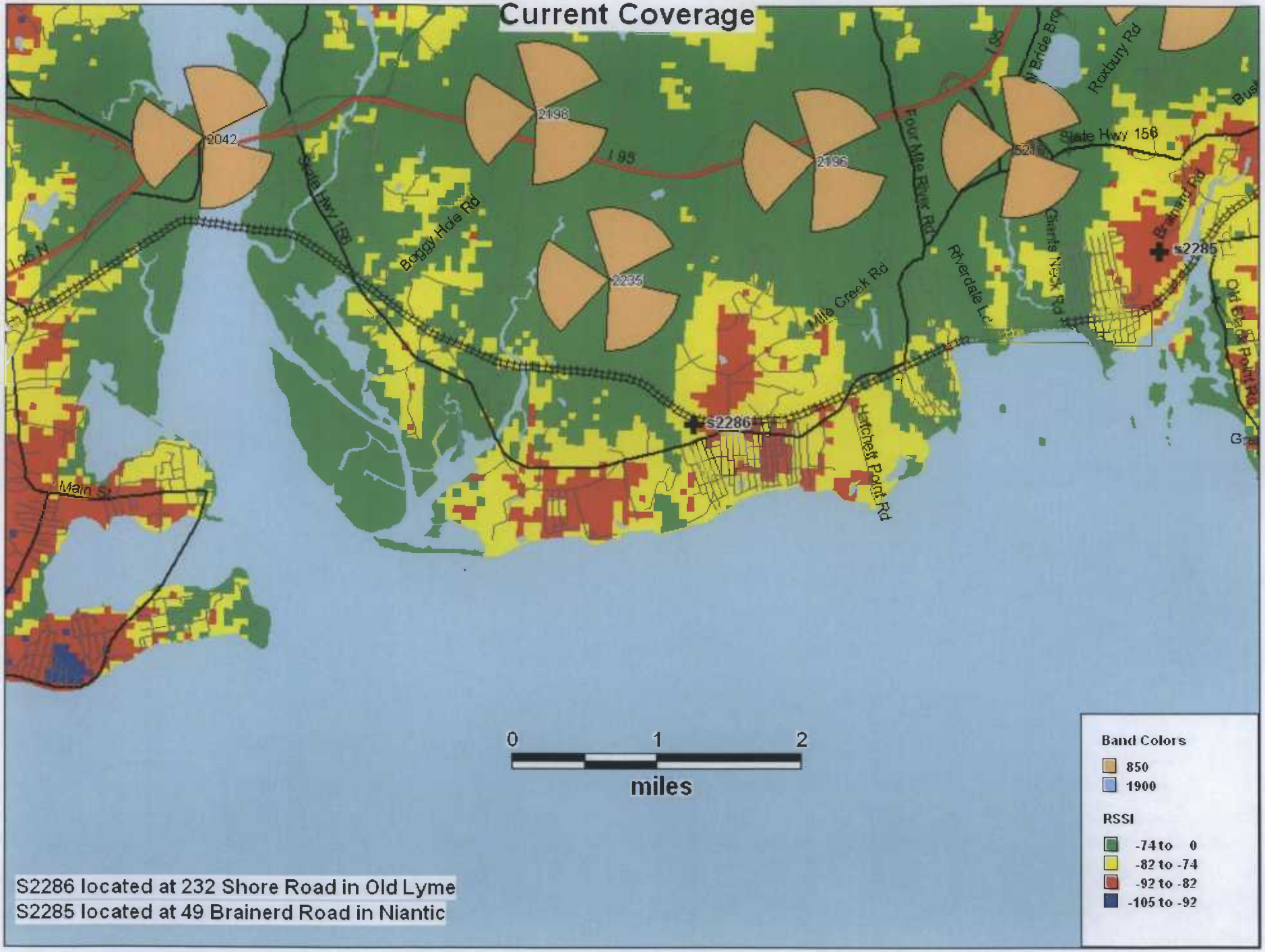
Dated: January 20, 2009

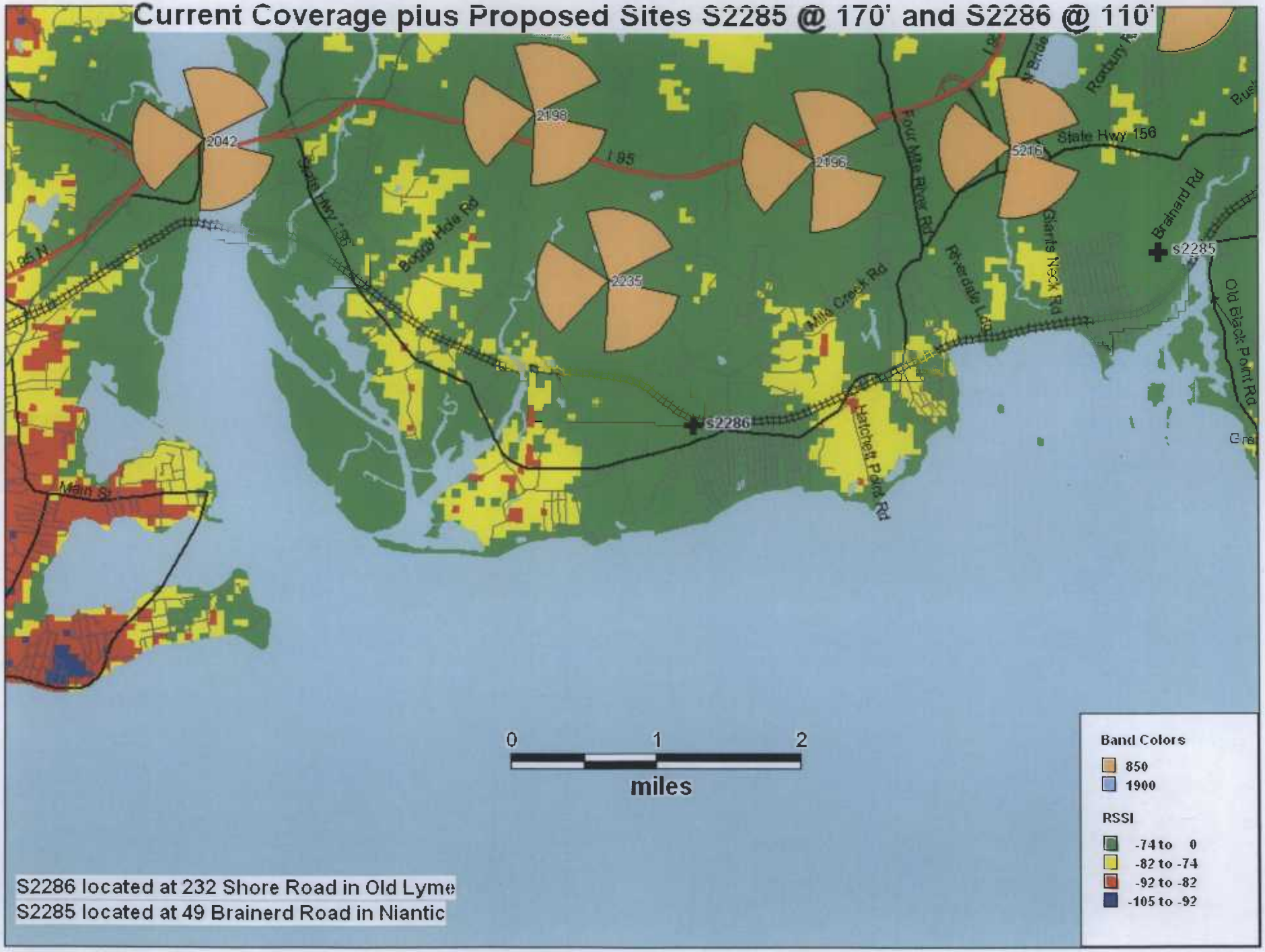


Daniel M. Laub

cc: Michele Briggs, AT&T
John Blevins, AT&T
Christopher B. Fisher, Esq.

1


Current Coverage
2042
2196
2196
2235
I 95
State Hwy 156
Boggy Hole Rd
Four Mile River Rd
Riverdale Ln
Mile Creek Rd
Hatchett Point Rd
Charlie Neck Rd
Brainerd Rd
Old Black Point Rd
Raxbury Rd
Main St
S2286
S2285
0
1
2
miles
Band Colors
850
1900
RSSI
-74 to 0
-82 to -74
-92 to -82
-105 to -92
S2286 located at 232 Shore Road in Old Lyme
S2285 located at 49 Brainerd Road in Niantic


Current Coverage plus Proposed Sites S2285 @ 170' and S2286 @ 110'
2042
2198
2196
2235
5216
I 95
State Hwy 156
Four Mile River Rd
Bradnard Rd
S2285
Old Black Point Rd
Mile Creek Rd
Riverdale Ln
Giants Neck Rd
Bokum Hole Rd
S2286
Hatchett Point Rd
Main St
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1
2
miles
Band Colors
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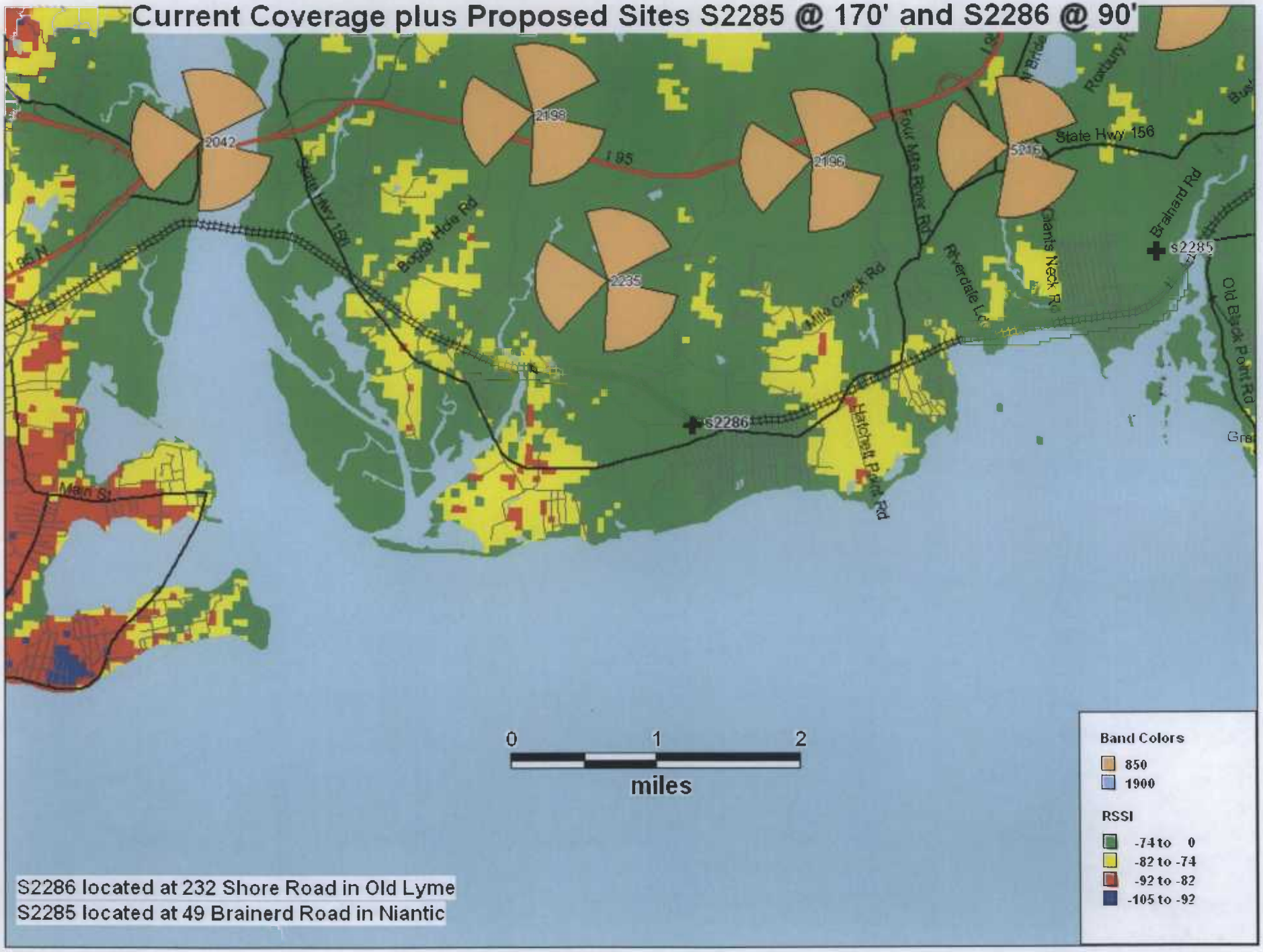
Current Coverage plus Proposed Sites S2285 @ 170' and S2286 @ 90'
2042
2198
195
2196
2235
State Hwy 156
Four Mile River Rd
Giants Neck Rd
Brainard Rd
S2285
Old Black Point Rd
Mile Creek Rd
Riverdale Ln
S2286
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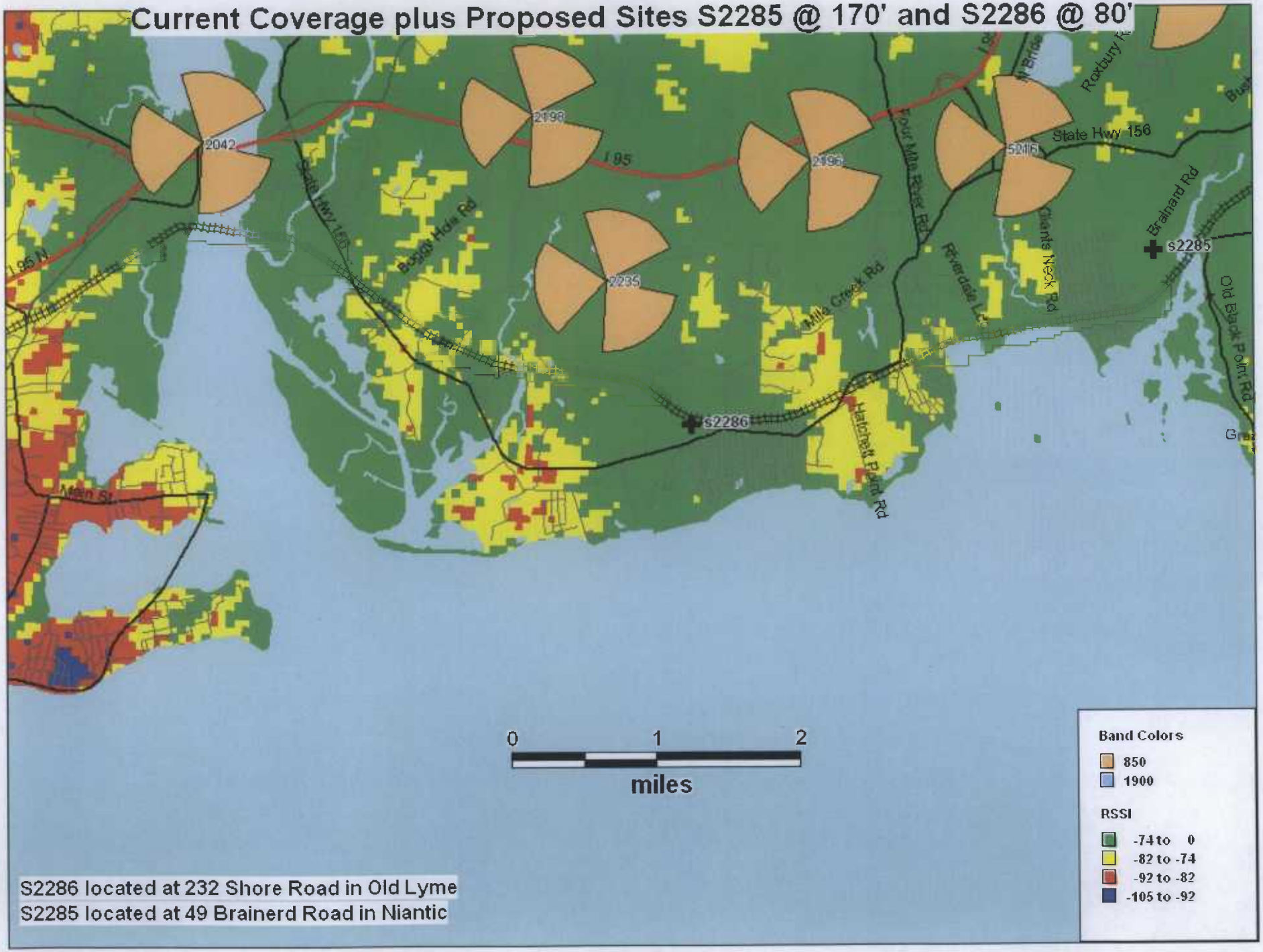
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S2285 located at 49 Brainerd Road in Niantic

2

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David W. Vivian
Real Estate Consultant

January 6, 2010

TO: Atty Chris Fisher

FROM: David Vivian

RE: Power Density Calculation for Antennas on a Proposed Tower at 232 Shore Road, Old Lyme, CT

The cumulative worst-case power density for this site in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at ground level beside the tower follows.

This worst-case calculation assumes all channels working simultaneously at full power with the antennas facing directly downward.

	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
AT&T GSM	107	1900 Band	2	427	0.0268	1.0000	2.68
AT&T GSM	107	880 - 894	4	296	0.0372	0.5867	6.34
AT&T UMTS	107	880 - 894	1	500	0.0157	0.5867	2.68
Total							**11.7%**

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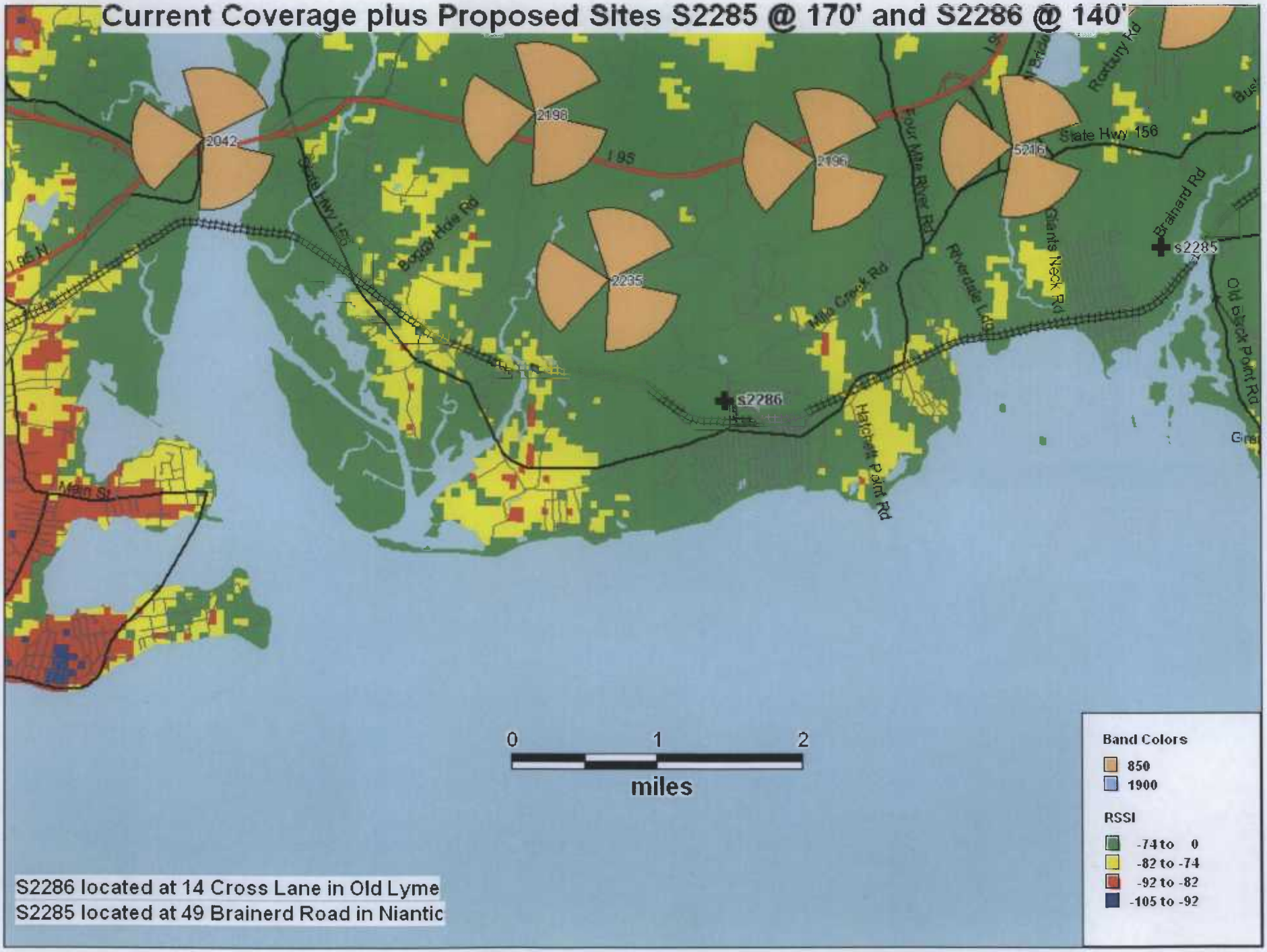
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