HIGH RIVER ENERGY CENTER

PRE-CONSTRUCTION SOUND LEVEL IMPACT ASSESSMENT

Prepared for:

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October 2, 2019

Section 10.0

Construction Noise

10.0 CONSTRUCTION NOISE

Construction noise modeling was performed for the major phases of construction using the ISO 9613-2 sound propagation standard as implemented in the Cadna/A software package. Settings within Cadna/A were the same as described in Section 9.3. Reference sound source information was obtained from either the client or the FHWA's Roadway Construction Noise Model (RCNM). Modeling and analysis procedures generally followed the guidelines and recommendations of the FHWA Highway Construction Noise Handbook (FHWA-HEP-06-015, U.S. DOT, August 2006).

The majority of the construction activity will occur around each of the inverter sites, at the site of the substation, at each of the solar arrays and at the locations where HDD (Horizontal Directional Drilling) will occur. By its very nature, construction activity moves around the site. Full construction activity will generally occur at one site at a time, although there will be some overlap at adjacent sites for maximum efficiency. For modeling conservatism, it was assumed that full activity was occurring at the closest locations to their surrounding receptors. There are generally five phases of construction for a solar energy project – site preparation and grading, trenching and road construction, HDD, equipment installation, and commissioning. Table 10-1 presents the equipment sound levels for the louder pieces of construction equipment expected to be used at this site along with their phase of construction.

Four areas within the Project Area were chosen to calculate worst case construction sound levels. The areas and assumed sites of simultaneous construction are:

- Area 1 – This area includes the closest receptors to an inverter (ID #16). Modeling assumed simultaneous construction activity at this inverter. Site Preparation and Grading work, Trenching and Road Construction work, Equipment Installation work, and Commissioning work was modeled at this site.

- Area 2 – This area includes the closest receptor to the site of the substation. Modeling assumed simultaneous construction activity at the substation. Site Preparation and Grading work, Trenching and Road Construction work, Equipment Installation work, and Commissioning work was modeled at the substation.

- Area 3 – This area includes the closest receptors to a solar array panel. Modeling assumed simultaneous construction activity at this solar array panel. Site Preparation and Grading work, Trenching and Road Construction work, Equipment Installation work, and Commissioning work was modeled at this site.

- Area 4 – This area includes all receptors in the vicinity of the closest HDD entry point to a receptor. Modeling assumed simultaneous construction activity at this HDD entry point. HDD work and Commissioning work was modeled at this HDD entry point.

For each of the four areas, cumulative construction sound levels at the ten closest receptors have been calculated. These receptors included both non-participants and participants. The results are shown as maximum 1-second Leq sound levels with all pieces of equipment for each phase operating at the sites. These results overstate expected real-world results since under actual construction conditions, not all pieces of equipment will be operating at the same exact time, and the highest sound levels from every piece of equipment will not tend to occur at the same time as was assumed in the modeling. Figure 10-1 shows the four representative areas of construction activity.

Table 10-1 Sound Levels for Noise Sources Included in Construction Modeling

Phase	Equipment	Sound Level at 50 feet [dBA]
Site Preparation & Grading	Grader (174 hp)	85
Site Preparation & Grading	Rubber Tired Loader (164 hp)	85
Site Preparation & Grading	Scraper (313 hp)	89
Site Preparation & Grading	Water Truck (189 hp)	80
Site Preparation & Grading	Generator Set	81
Trenching & Road Construction	(2) Excavator (168 hp)	85
Trenching & Road Construction	Bar Trencher (600 hp)	89
Trenching & Road Construction	Grader (174 hp)	85
Trenching & Road Construction	Water Truck (189 hp)	80
Trenching & Road Construction	Trencher (63 hp)	83
Trenching & Road Construction	Rubber Tired Loader (164 hp)	85
Trenching & Road Construction	Generator Set	81
Equipment Installation	Crane (399 hp)	83
Equipment Installation	Crane (165 hp)	83
Equipment Installation	(2)Forklift (145 hp)	85
Equipment Installation	(2) Pile Driver	84
Equipment Installation	(6) Pickup Truck/ATV	55
Equipment Installation	(2) Water Truck (189 hp)	80
Equipment Installation	(2) Generator Set	81
HDD Entry	Excavator (168 hp)	85
HDD Entry	Auger Drill Rig	85
HDD Entry	Pickup Truck/ATV	55
Commissioning	(2) Pickup Truck/ATV	55

10.1 Area 1 Modeling Results

The cumulative impacts from Site Preparation and Grading work, Trenching and Road Construction work, Equipment Installation work, and Commissioning work was calculated with the Cadna model for the ten closest receptors to construction activity within Area 1. The loudest phase of construction within this area will be Trenching and Road Construction work. A sound contour figure of Trenching and Road Construction work occurring at the inverter (ID# 16) is presented in Figure 10-1, Map 1.

The highest sound level at a non-participating receptor within this area is 66 dBA during site preparation and grading (Receptor #50), 68 dBA during trenching and road construction (Receptor #50), 67 dBA during equipment installation (Receptor #50), and 32 dBA during commissioning (Receptor #50). The existing condition L_{eq} sound levels measured for this area are 55 dBA using the ANS-weighted broadband sound level data. Modeling results of construction sound levels within this area are summarized in Table 10-2.

Table 10-2 Construction Noise Modeling Results – Area 1 Construction [dBA]

Receptor ID	Distance [m]	Participation Status	Site Preparation & Grading	Trenching & Road Construction	Equipment Installation	Commissioning	Assigned Measurement ID[1]	Daytime Ambient Leq[2]
50	131	Non-Participating	66	68	67	32	1	55
145	196	Non-Participating	63	64	64	29	1	55
52	216	Non-Participating	62	64	63	28	1	55
143	281	Non-Participating	60	62	61	26	1	55
347	349	Non-Participating	58	60	59	24	1	55
81	381	Non-Participating	57	59	58	23	4	53
108	398	Participating	52	54	53	18	1	55
142	407	Non-Participating	57	58	57	22	1	55
33	433	Participating	56	58	57	22	4	53
141	455	Non-Participating	56	57	56	21	1	55

1 = See Table G-1

2 = ANS-weighted values from Table 8-3

10.2 Area 2 Modeling Results

The cumulative impacts from Site Preparation and Grading work, Trenching and Road Construction work, Equipment Installation work, and Commissioning work was calculated with the Cadna model for the ten closest receptors to construction activity within Area 2. The loudest phase of construction within this area will be Trenching and Road Construction work. A sound contour figure of Trenching and Road Construction work occurring at the substation is presented in Figure 10-1, Map 2.

The highest sound level at a non-participating receptor within this area is 64 dBA during site preparation and grading (Receptor #219), 66 dBA during trenching and road construction (Receptor #219), 65 dBA during equipment installation (Receptor #219), and 30 dBA during commissioning (Receptor #219). The existing condition L_{eq} sound levels measured for this area are 43-59 dBA using the ANS-weighted broadband sound level data. Modeling results of construction work sound levels within this area are summarized in Table 10-3.

Table 10-3 Construction Noise Modeling Results – Area 2 Construction [dBA]

Receptor ID	Distance [m]	Participation Status	Site Preparation & Grading	Trenching & Road Construction	Equipment Installation	Commissioning	Assigned Measurement ID[1]	Daytime Ambient Leq[2]
219	143	Non-Participating	64	66	65	30	1	55
136	197	Non-Participating	61	63	62	27	1	55
140	212	Non-Participating	61	62	61	26	1	55
109	219	Non-Participating	60	62	61	26	1	55
349	239	Participating	60	62	61	26	1	55
197	254	Participating	55	57	56	21	1	55
243	294	Non-Participating	58	60	59	24	1	55
190	314	Non-Participating	58	60	59	24	1	55
146	314	Non-Participating	58	60	59	24	1	55
195	325	Non-Participating	58	59	58	23	1	55

1 = See Table G-1

2 = ANS-weighted values from Table 8-3

10.3 Area 3 Modeling Results

The cumulative impacts from Site Preparation and Grading work, Trenching and Road Construction work, Equipment Installation work, and Commissioning work was calculated with the Cadna model for the ten closest receptors to construction activity within Area 3. The loudest phase of construction within this area will be Trenching and Road Construction work. A sound contour figure of Trenching and Road Construction work occurring at the solar array panel (ID #2539) is presented in Figure 10-1, Map 3.

The highest sound level at a non-participating receptor within this area is 67 dBA during site preparation and grading (Receptor #139), 68 dBA during trenching and road construction (Receptor #139), 67 dBA during equipment installation (Receptor #139), and 33 dBA during commissioning (Receptor #139). The existing condition L_{eq} sound levels measured for this area are 55 dBA using the ANS-weighted broadband sound level data. Modeling results of construction sound levels within this area are summarized in Table 10-4.

Table 10-4 Construction Noise Modeling Results – Area 3 Construction [dBA]

Receptor ID	Distance [m]	Participation Status	Site Preparation & Grading	Trenching & Road Construction	Equipment Installation	Commissioning	Assigned Measurement ID[1]	Daytime Ambient Leq[2]
197	31	Participating	80	82	81	46	1	55
139	125	Non-Participating	67	68	67	33	1	55
349	139	Participating	66	67	66	31	1	55
195	146	Non-Participating	65	67	66	31	1	55
141	166	Non-Participating	64	66	65	30	1	55
146	211	Non-Participating	62	64	63	28	1	55
138	212	Non-Participating	62	64	63	28	1	55
148	229	Non-Participating	61	63	62	27	1	55
142	263	Non-Participating	60	62	61	26	1	55
243	266	Non-Participating	60	62	61	26	1	55

1 = See Table G-1

2 = ANS-weighted values from Table 8-3

10.4 Area 4 Modeling Results

The cumulative impacts from Horizontal Directional Drilling (HDD) work and Commissioning work was calculated with the Cadna model for the ten closest receptors to construction activity within Area 4. The loudest phase of construction within this area will be HDD work. A sound contour figure of HDD work occurring at the HDD entry point is presented in Figure 10-1, Map 4.

The highest sound level at a non-participating receptor within this area is 67 dBA during HDD (Receptor #145) and 37 dBA during commissioning (Receptor #145). The existing condition L_{eq} sound levels measured for this area are 53-55 dBA using the ANS-weighted broadband sound level data. Modeling results of construction sound levels within this area are summarized in Table 10-5.

Table 10-5 Construction Noise Modeling Results – Area 4 Construction [dBA]

Receptor ID	Distance [m]	Participation Status	HDD	Commissioning	Assigned Measurement ID[1]	Daytime Ambient Leq[2]
145	81	Non-Participating	67	37	1	55
50	116	Non-Participating	63	33	1	55
143	210	Non-Participating	58	28	1	55
52	265	Non-Participating	56	26	1	55
347	284	Non-Participating	56	26	1	55
142	346	Non-Participating	54	24	1	55
141	366	Non-Participating	53	23	1	55
139	390	Non-Participating	53	23	1	55
38	421	Non-Participating	52	22	1	55
81	437	Non-Participating	47	17	4	53

1 = See Table G-1

2 = ANS-weighted values from Table 8-3

10.5 Construction Noise Conclusions

Noise due to construction is an unavoidable outcome of construction. Construction is expected to last approximately 7-10 months and will be performed in several phases. The four major construction phases are: site preparation and grading, trenching and road construction, equipment installation, and commissioning. Most of the construction will occur at significant distances to sensitive receptors, and therefore noise from most phases of construction is not expected to result in impacts. There are a few instances where construction will be fairly close to residences (#197; #145) and coordination with these neighbors may be warranted. However, the Noise Complaint Resolution Plan provided with this Application contains the procedures to be followed in the event of a noise complaint during construction. Construction noise will be minimized through the use of best management practices (BMP) such as those listed in Section 5.2.1.

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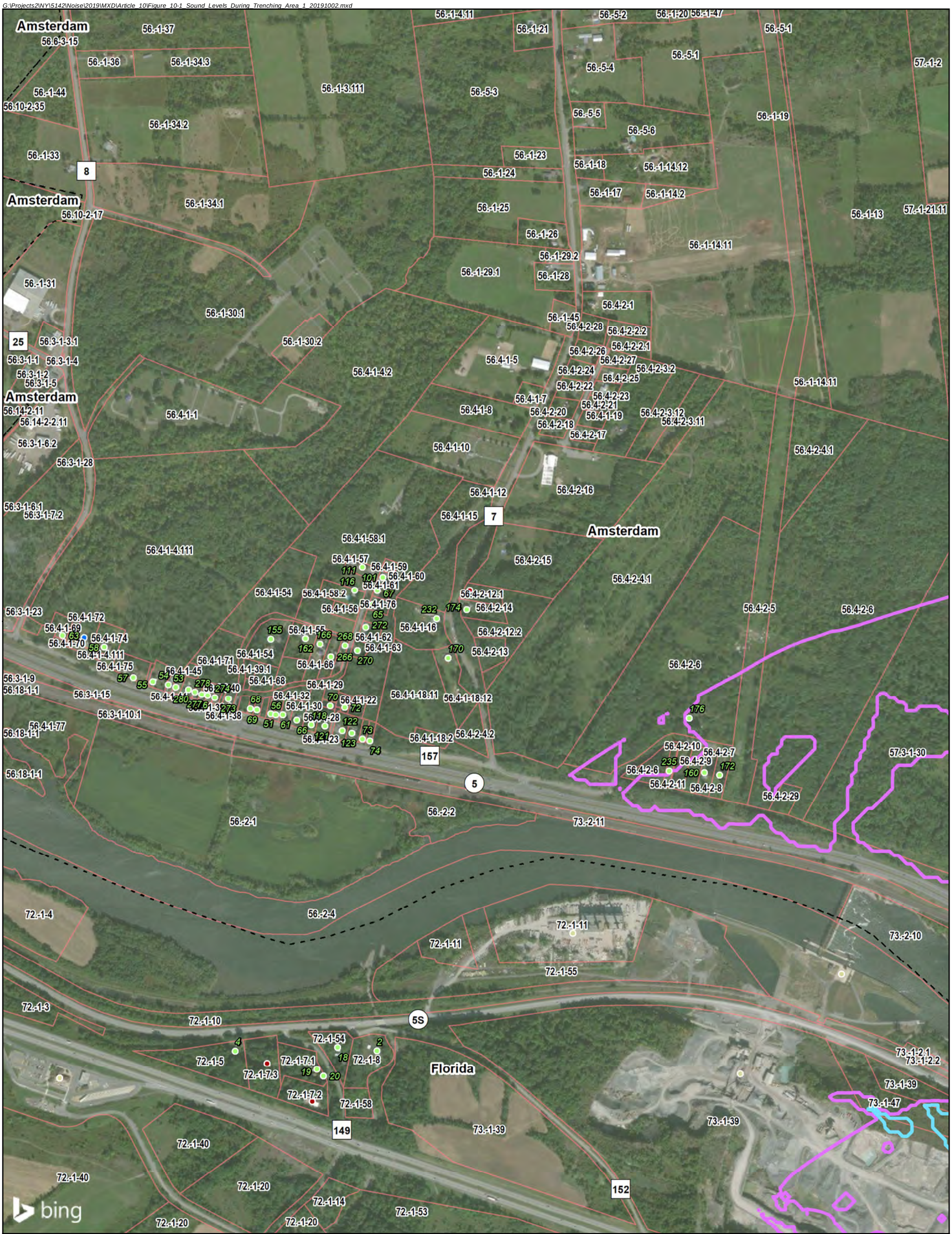

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Figure 10-1, Map 1 of 34

Sound Levels During Trenching - Area 1

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- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet

0 350 700 Feet

1	**2**	3
4	5	6
7	8	9
10		

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Figure 10-1, Map 2 of 34
Sound Levels During Trenching - Area 1

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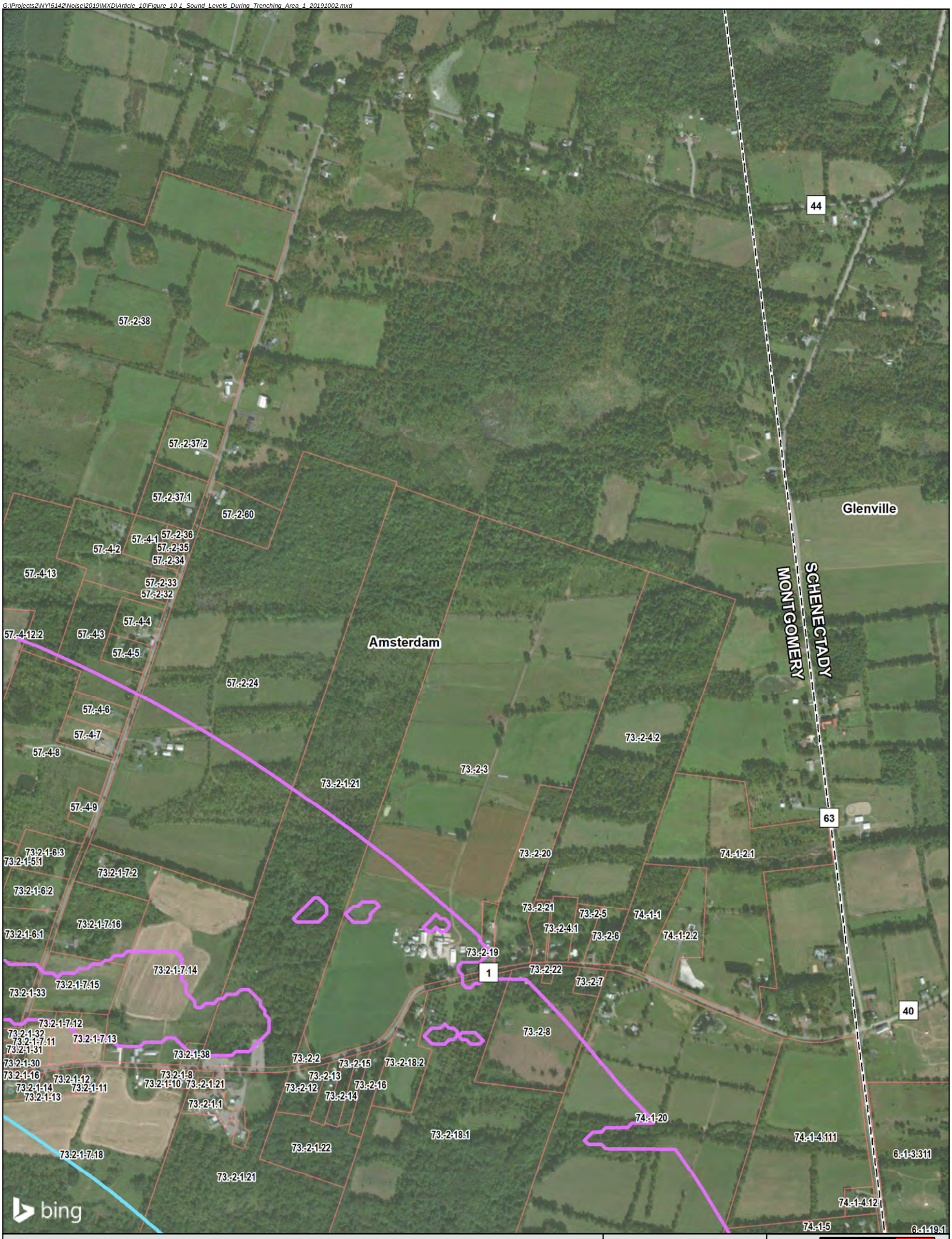

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Figure 10-1, Map 3 of 34

Sound Levels During Trenching - Area 1

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Inverter
Year-Round Residence
Seasonal Residence
Public
Unknown
Participating Parcel
Non-Participating Parcel
Project Boundary

Array Panels
HDD
Laydown Yard
Switchyard
Control Houses
Substation
City/Town Boundary
County Boundary

Predicted Sound Level (dBA)

35
40
45
50
55
60

Scale 1:8,403
1 inch = 700 feet
0 350 700 Feet

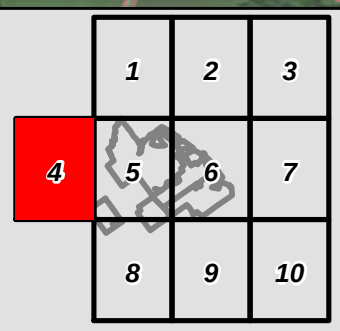

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Figure 10-1, Map 4 of 34
Sound Levels During Trenching - Area 1

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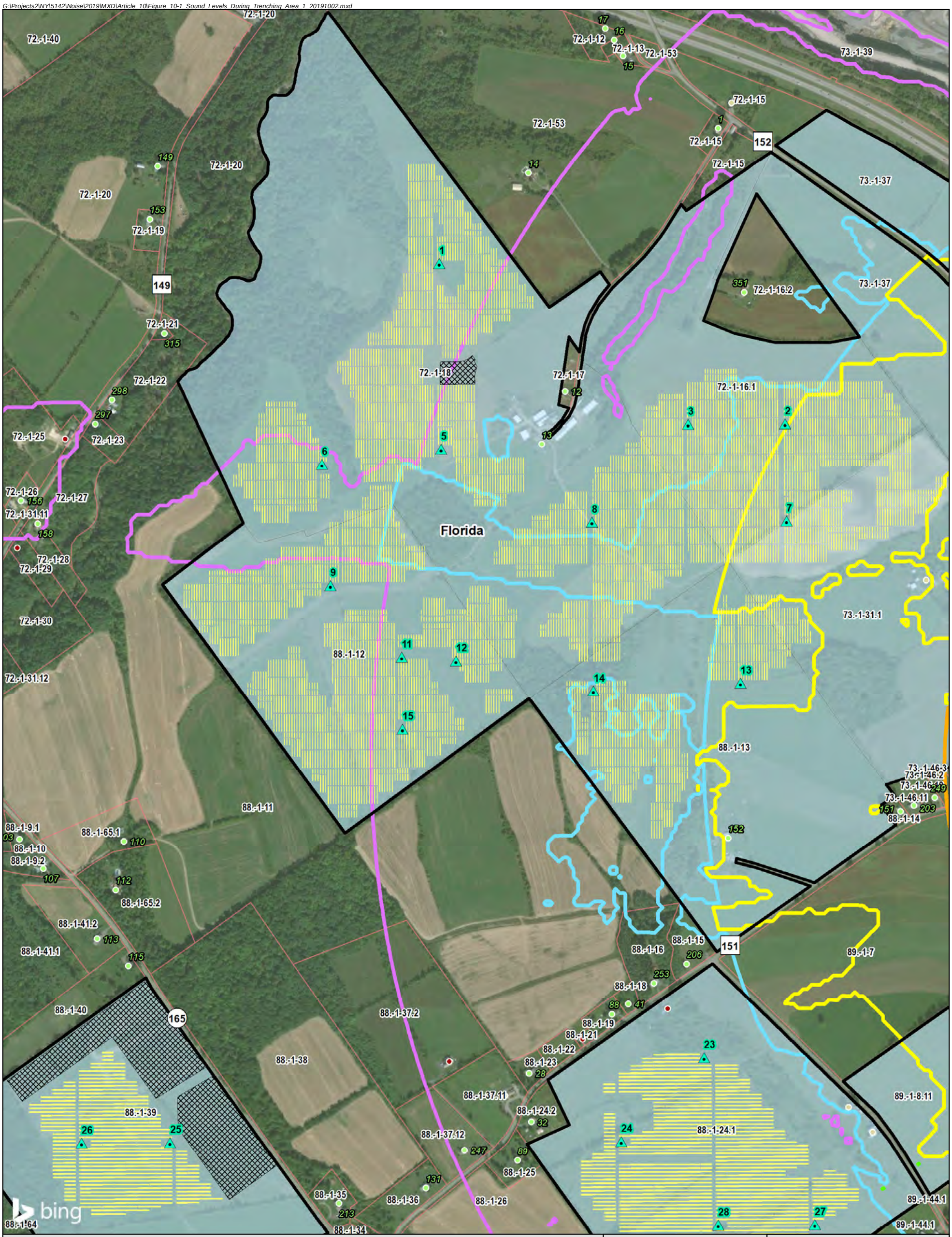

- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet
0 350 700 Feet

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Figure 10-1, Map 5 of 34
Sound Levels During Trenching - Area 1

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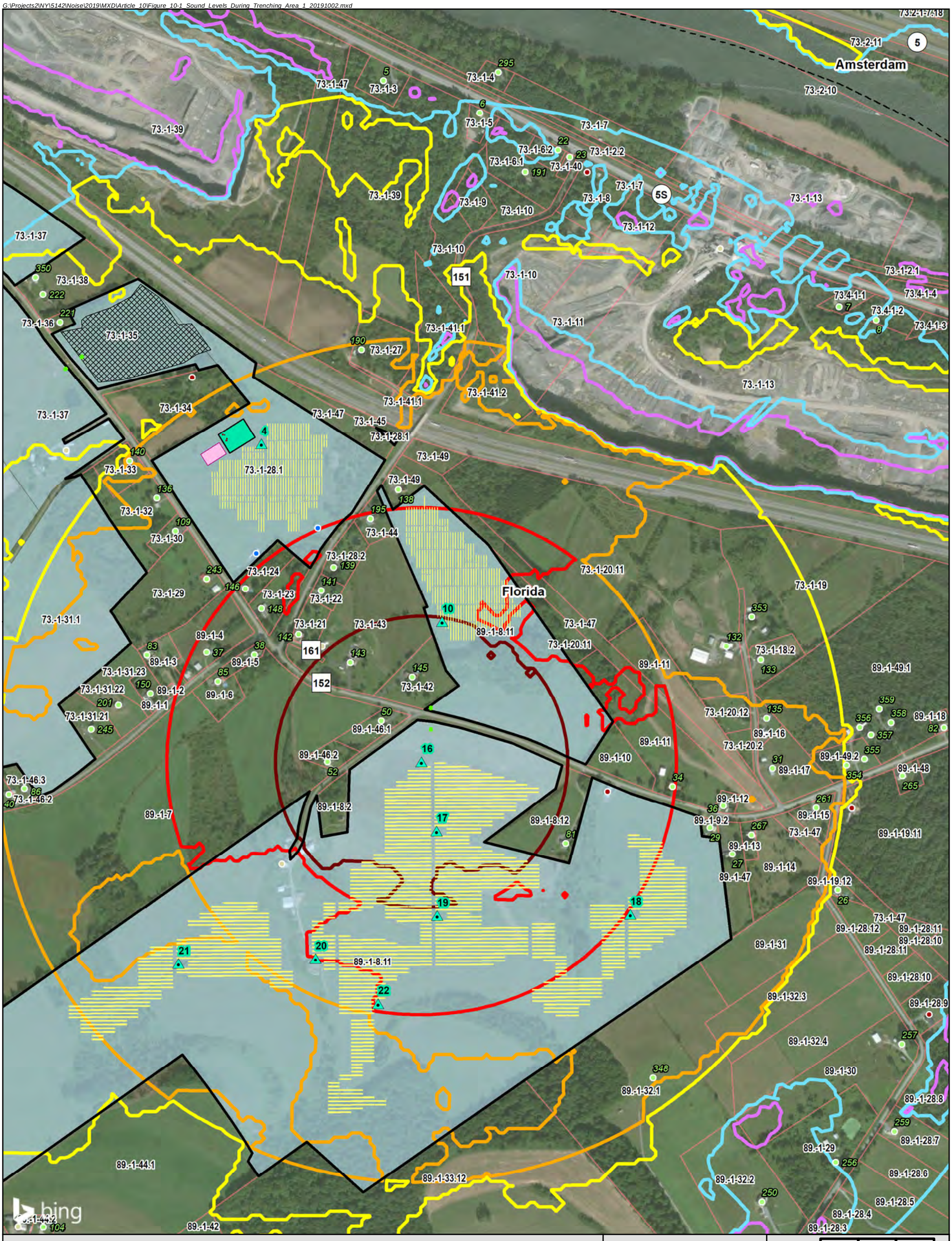

Inverter
Year-Round Residence
Seasonal Residence
Public
Unknown
Participating Parcel
Non-Participating Parcel
Project Boundary

Array Panels
HDD
Laydown Yard
Switchyard
Control Houses
Substation
City/Town Boundary
County Boundary

Predicted Sound Level (dBA)
35
40
45
50
55
60

Scale 1:8,403
1 inch = 700 feet
0 350 700 Feet

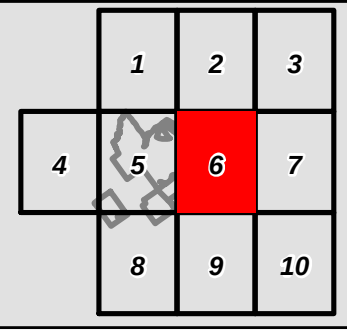

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Figure 10-1, Map 6 of 34
Sound Levels During Trenching - Area 1

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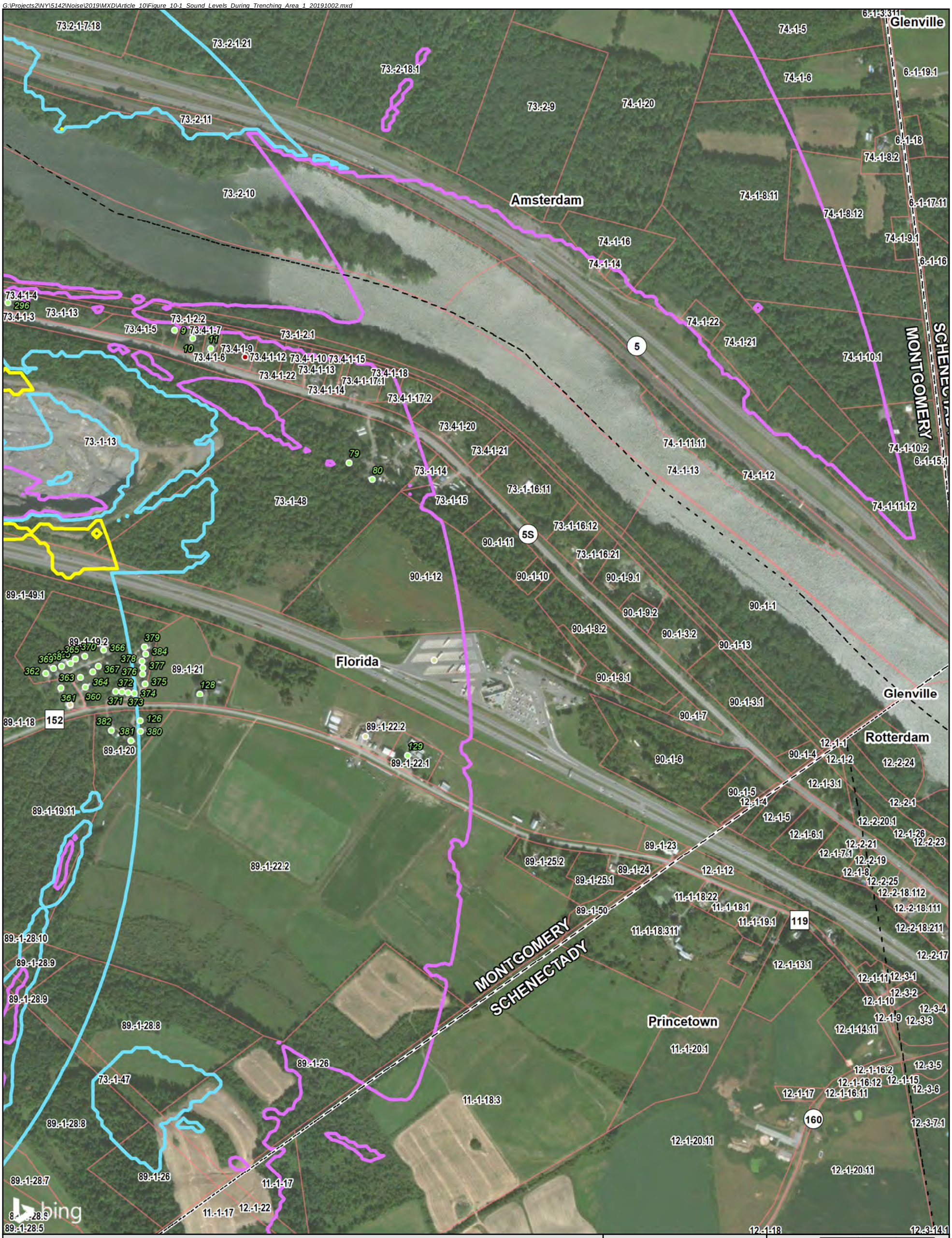

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Figure 10-1, Map 7 of 34

Sound Levels During Trenching - Area 1

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Figure 10-1, Map 8 of 34

Sound Levels During Trenching - Area 1

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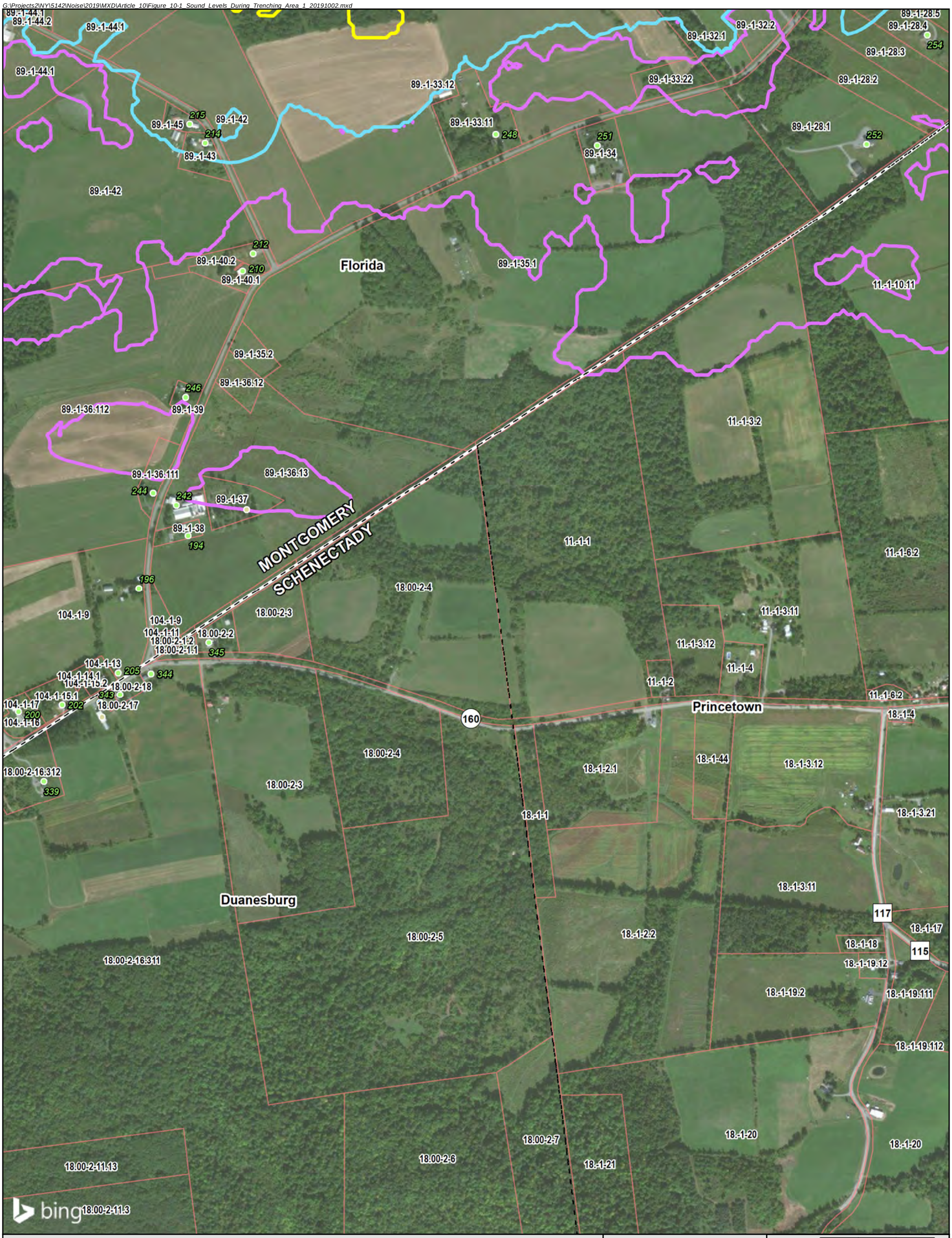

- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet

0 350 700 Feet

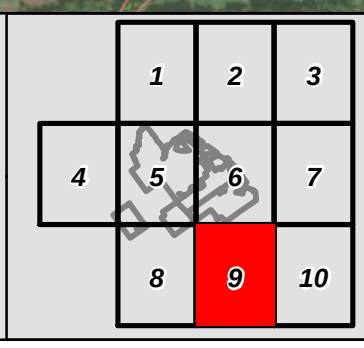

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Figure 10-1, Map 9 of 34
Sound Levels During Trenching - Area 1

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Inverter	Array Panels	**Predicted Sound Level (dBA)**
Year-Round Residence	HDD	35
Seasonal Residence	Laydown Yard	40
Public	Switchyard	45
Unknown	Control Houses	50
Participating Parcel	Substation	55
Non-Participating Parcel	City/Town Boundary	60
Project Boundary	County Boundary	

Scale 1:8,403
1 inch = 700 feet
0 350 700 Feet

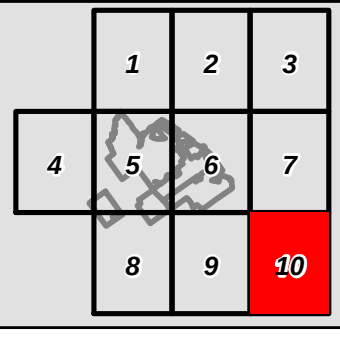

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Figure 10-1, Map 10 of 34
Sound Levels During Trenching - Area 1

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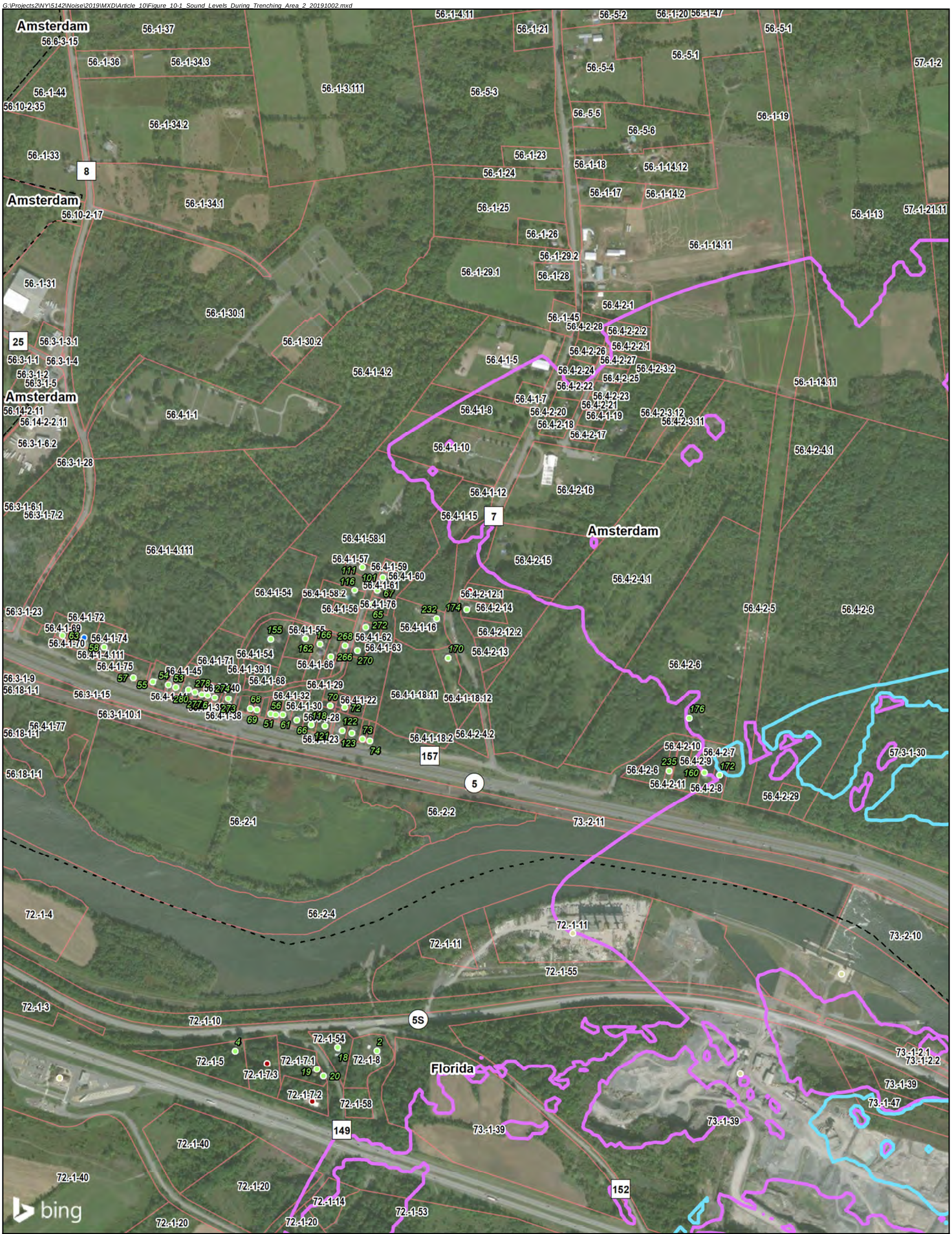

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Figure 10-1, Map 11 of 34

Sound Levels During Trenching - Area 2

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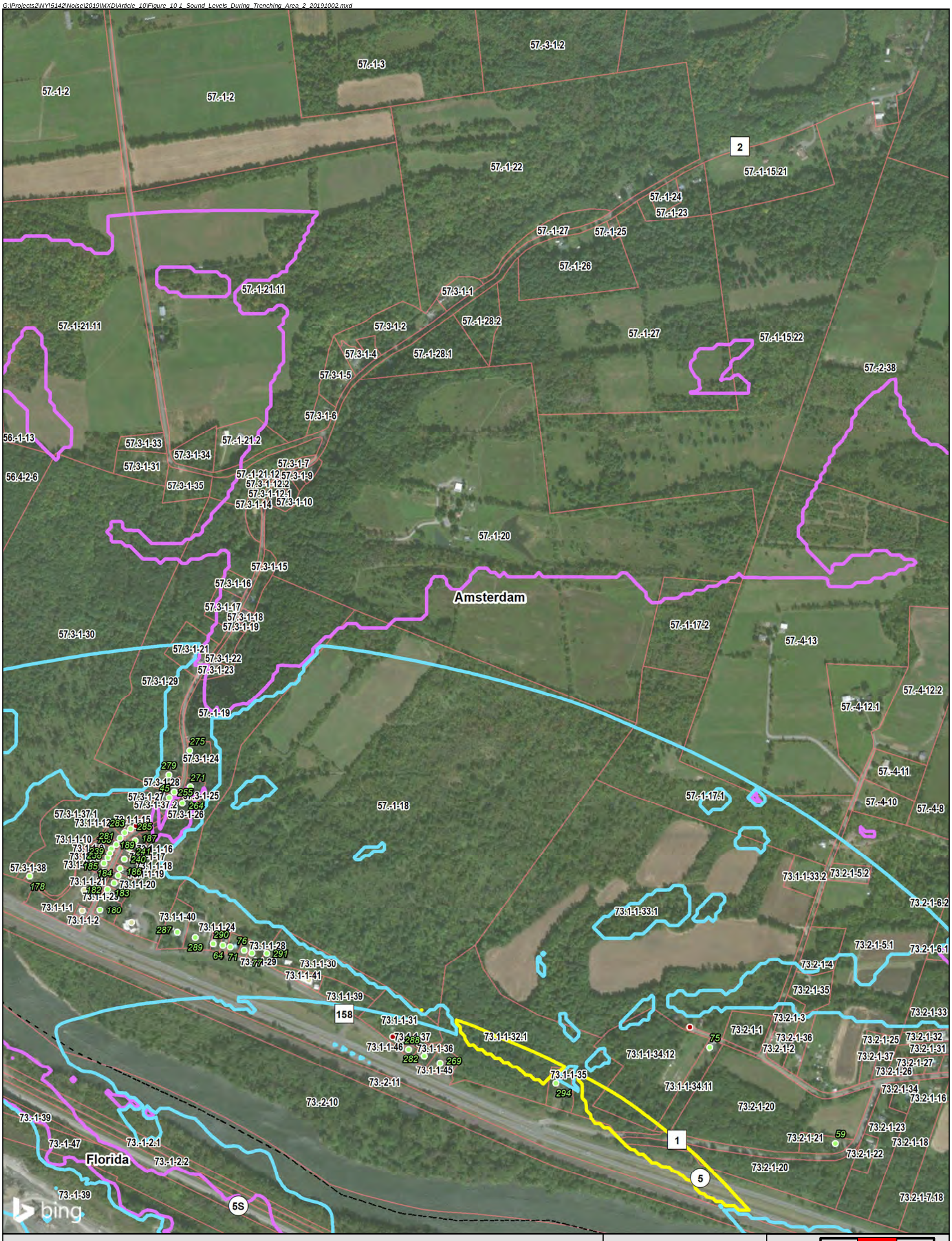

- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet
0 350 700 Feet

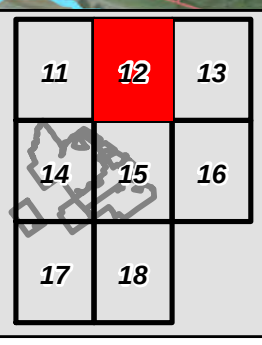

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Figure 10-1, Map 12 of 34
Sound Levels During Trenching - Area 2

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- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet
0 350 700 Feet

11	12	13
14	15	16
17	18	

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Figure 10-1, Map 13 of 34
Sound Levels During Trenching - Area 2

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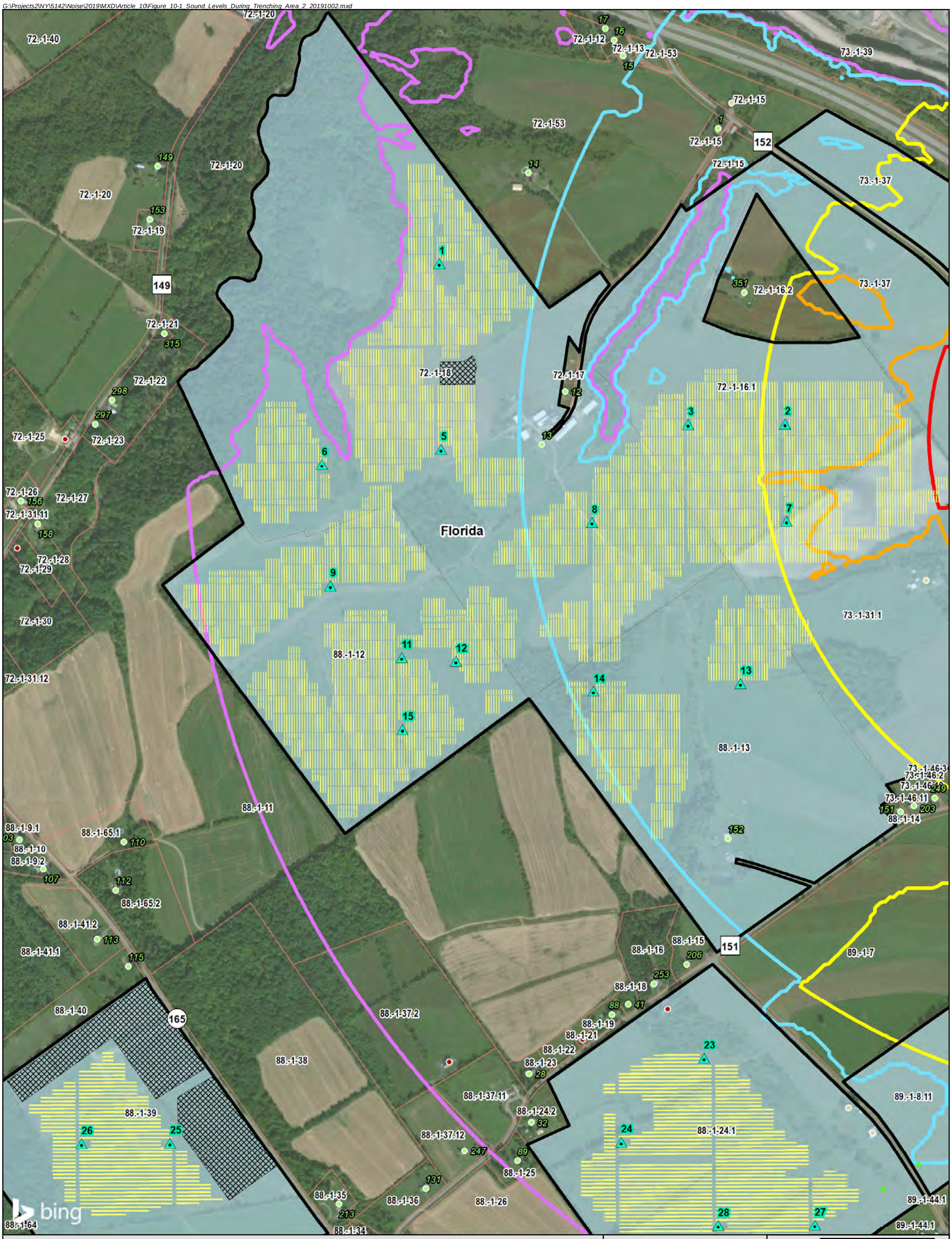

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Figure 10-1, Map 14 of 34

Sound Levels During Trenching - Area 2

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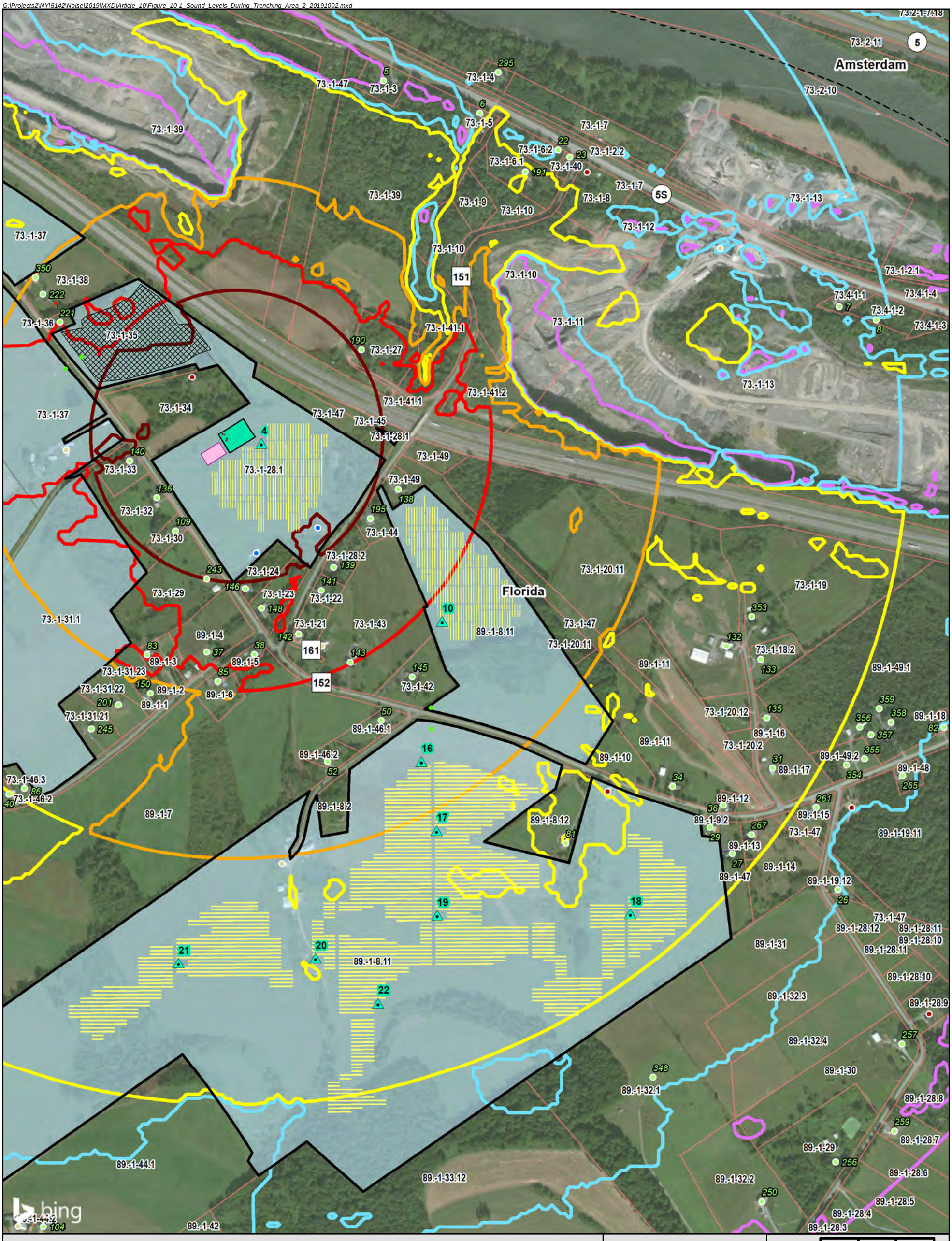

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Figure 10-1, Map 15 of 34

Sound Levels During Trenching - Area 2

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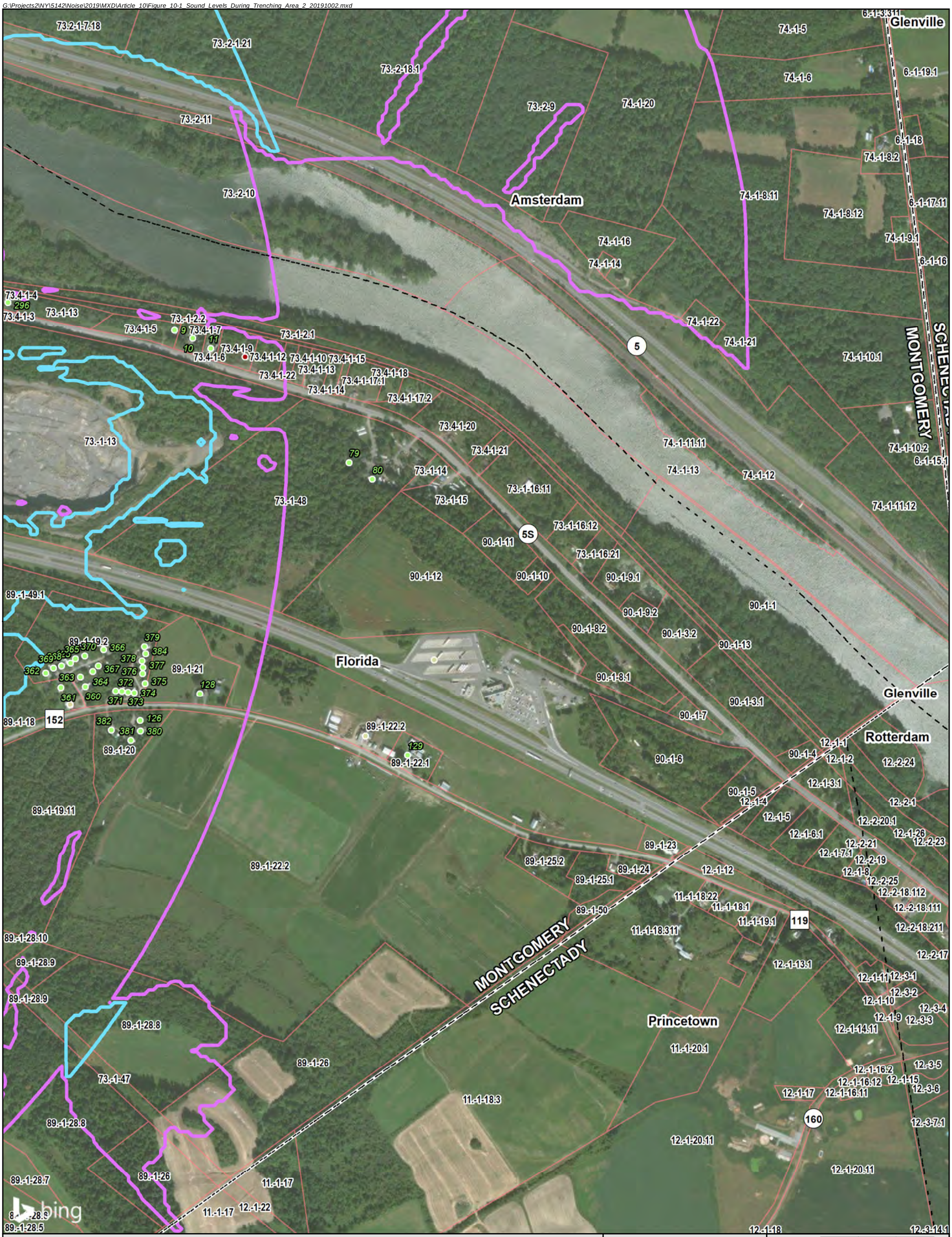

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Figure 10-1, Map 16 of 34

Sound Levels During Trenching - Area 2

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High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 17 of 34

Sound Levels During Trenching - Area 2

G:\Projects2\NY\5142\Noise\2019\MXD\Article_10\Figure_10-1_Sound_Levels_During_Trenching_Area_2_20191002.mxd

- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet

0 350 700 Feet

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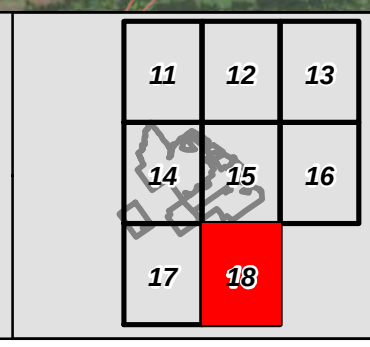

High River Solar **Montgomery County, New York**

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Figure 10-1, Map 18 of 34
Sound Levels During Trenching - Area 2

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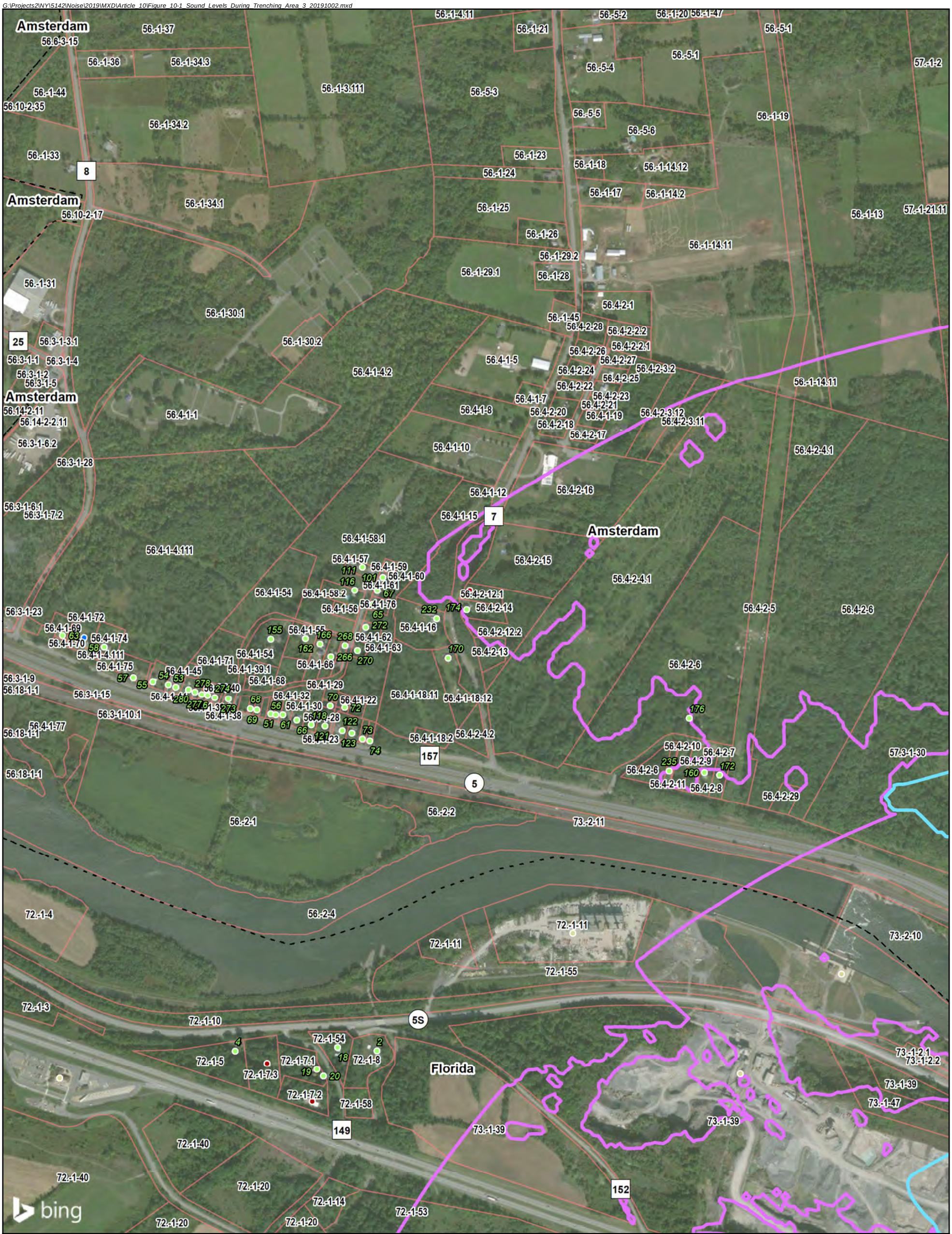

High River Solar **Montgomery County, New York**

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Figure 10-1, Map 19 of 34

Sound Levels During Trenching - Area 3

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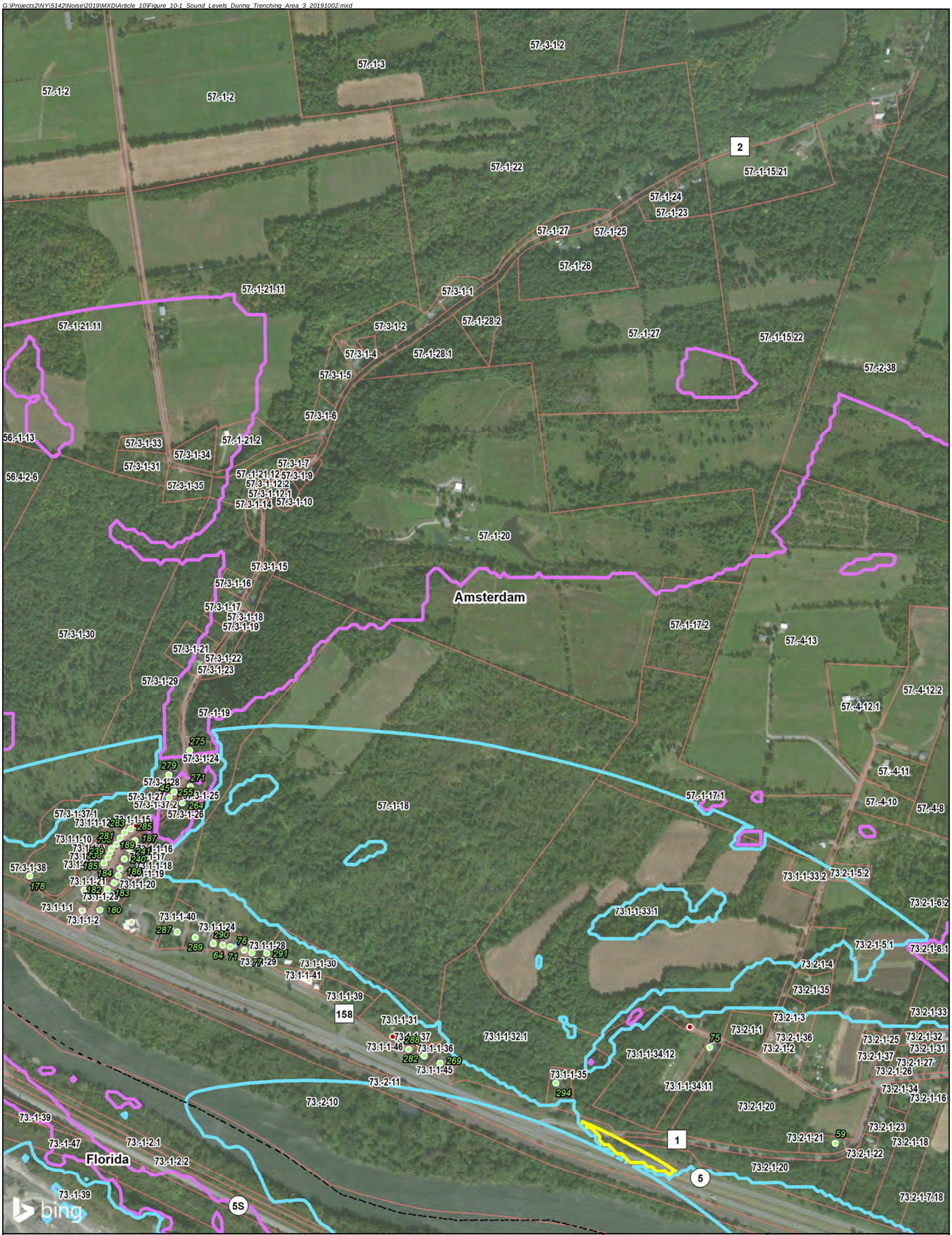

High River Solar **Montgomery County, New York**

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Figure 10-1, Map 20 of 34

Sound Levels During Trenching - Area 3

G:\Projects2\NY\5142\Noise\2019\MXD\Article_10\Figure_10-1_Sound_Levels_During_Trenching_Area_3_20191002.mxd

- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet

0 350 700 Feet

High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 21 of 34
Sound Levels During Trenching - Area 3

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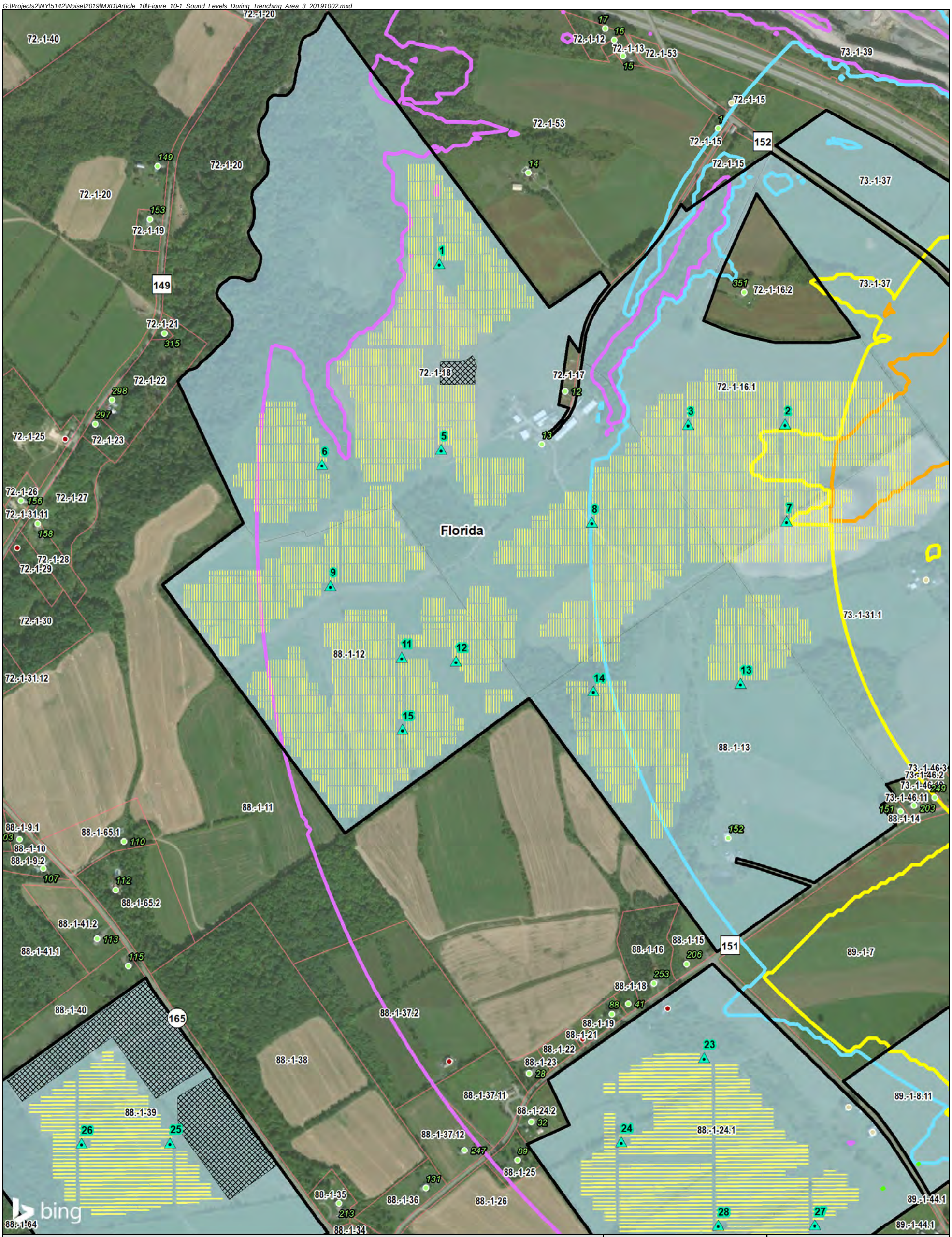

Inverter	Array Panels	**Predicted Sound Level (dBA)**
Year-Round Residence	HDD	35
Seasonal Residence	Laydown Yard	40
Public	Switchyard	45
Unknown	Control Houses	50
Participating Parcel	Substation	55
Non-Participating Parcel	City/Town Boundary	60
Project Boundary	County Boundary	

Scale 1:8,403
1 inch = 700 feet
0 350 700
Feet

19	20	21
22	23	24
25	26	27

High River Solar **Montgomery County, New York**

Figure 10-1, Map 22 of 34
Sound Levels During Trenching - Area 3

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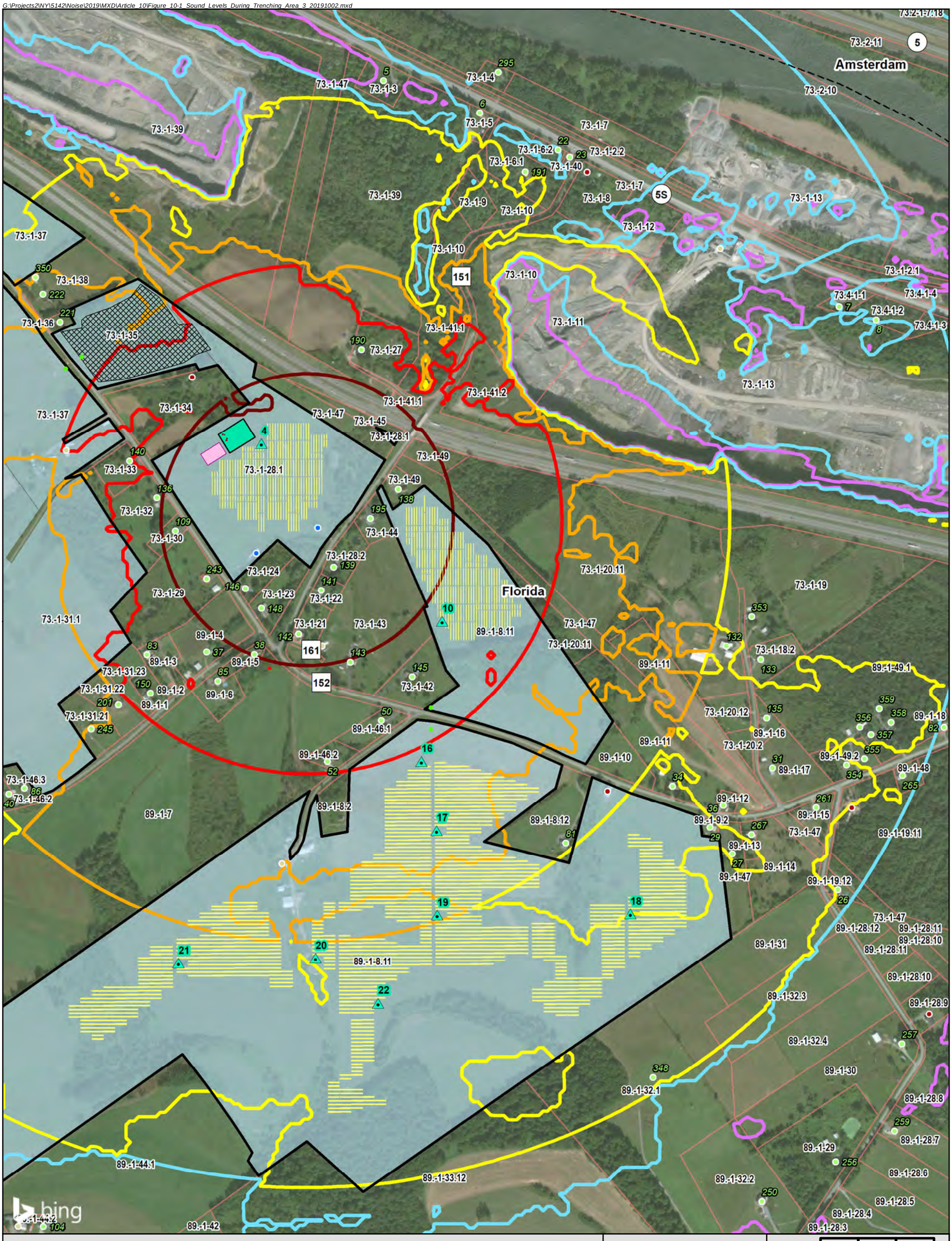

High River Solar **Montgomery County, New York**

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Figure 10-1, Map 23 of 34

Sound Levels During Trenching - Area 3

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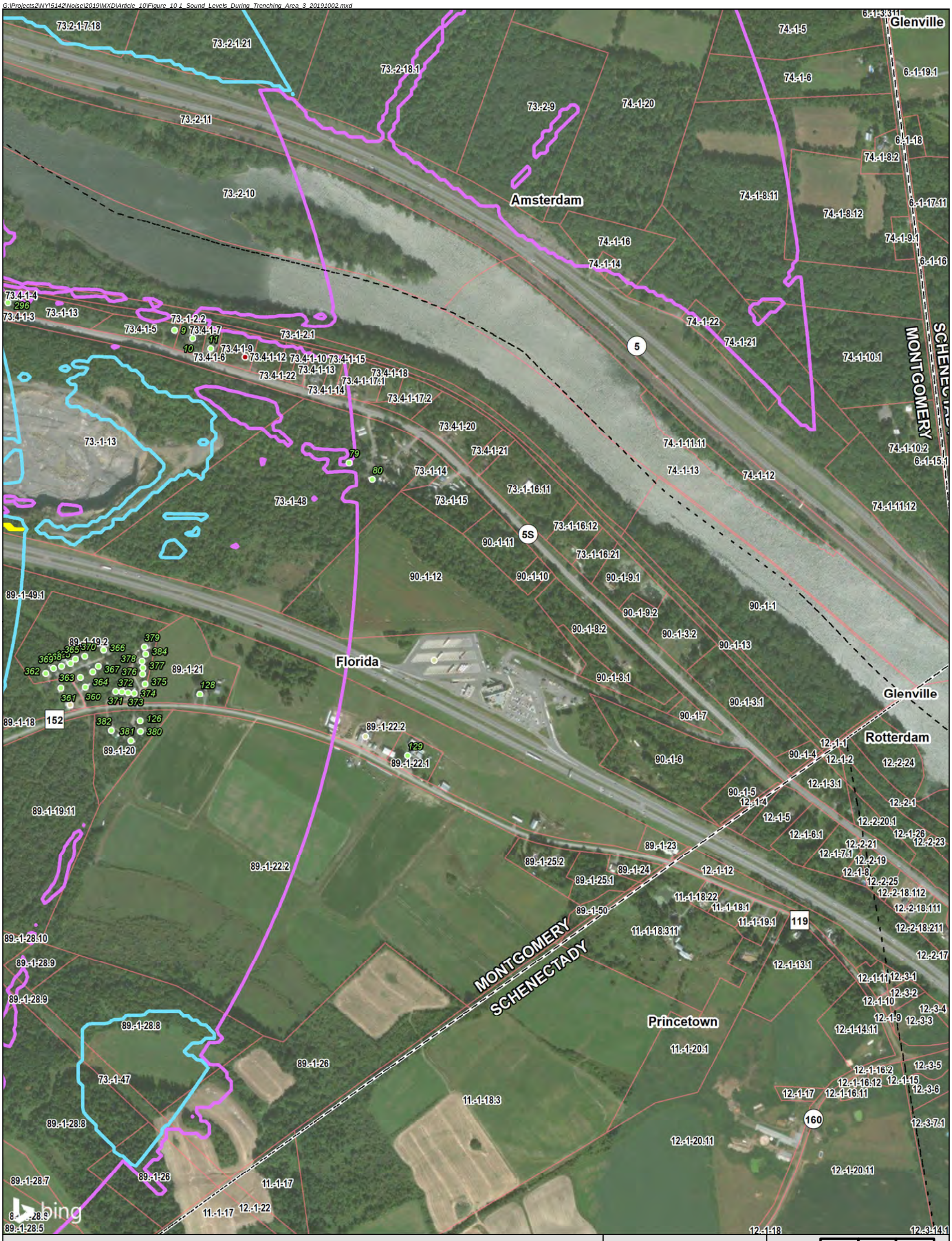

Inverter
Year-Round Residence
Seasonal Residence
Public
Unknown
Participating Parcel
Non-Participating Parcel
Project Boundary

Array Panels
HDD
Laydown Yard
Switchyard
Control Houses
Substation
City/Town Boundary
County Boundary

Predicted Sound Level (dBA)
35
40
45
50
55
60

Scale 1:8,403
1 inch = 700 feet
0 350 700
Feet

High River Solar **Montgomery County, New York**

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Figure 10-1, Map 24 of 34
Sound Levels During Trenching - Area 3

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High River Solar **Montgomery County, New York**

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Figure 10-1, Map 25 of 34

Sound Levels During Trenching - Area 3

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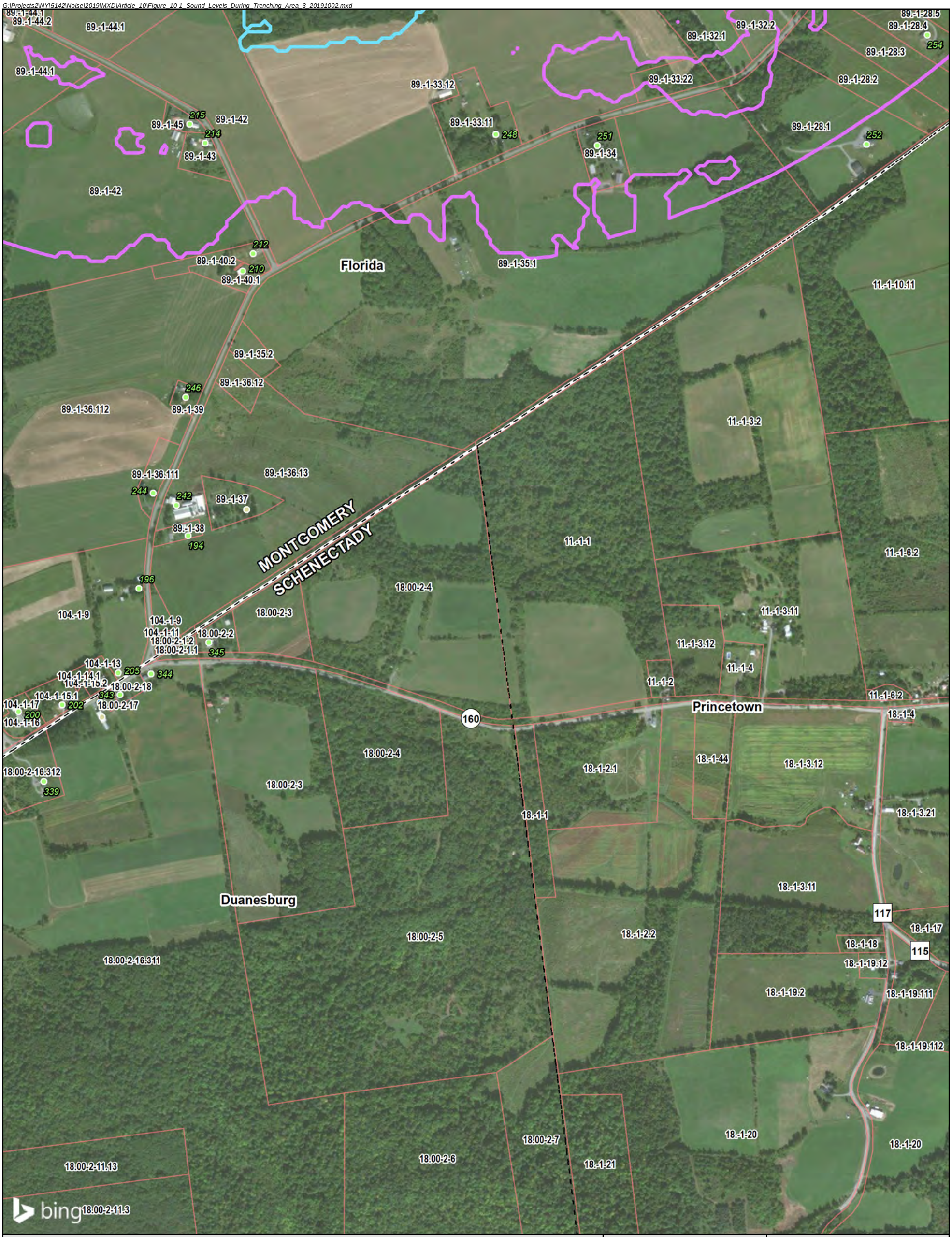

- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet

0 350 700 Feet

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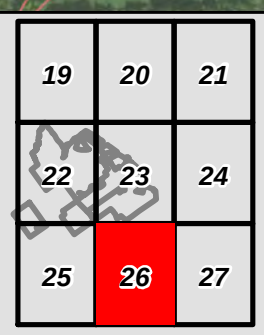

High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 26 of 34
Sound Levels During Trenching - Area 3

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High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 27 of 34

Sound Levels During Trenching - Area 3

G:\Projects2\NY\5142\Noise\2019\MXD\Article_10\Figure_10-1_Sound_Levels_During_HDD_Area_4_20191002.mxd

Amsterdam
Florida
bing

Inverter
Year-Round Residence
Seasonal Residence
Public
Unknown
Participating Parcel
Non-Participating Parcel
Project Boundary
Array Panels
HDD
Laydown Yard
Switchyard
Control Houses
Substation
City/Town Boundary
County Boundary

Predicted Sound Level (dBA)
35
40
45
50
55
60

Scale 1:8,403
1 inch = 700 feet
0 350 700
Feet

28 29 30
31 32 33
34

High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 28 of 34
Sound Levels During HDD - Area 4

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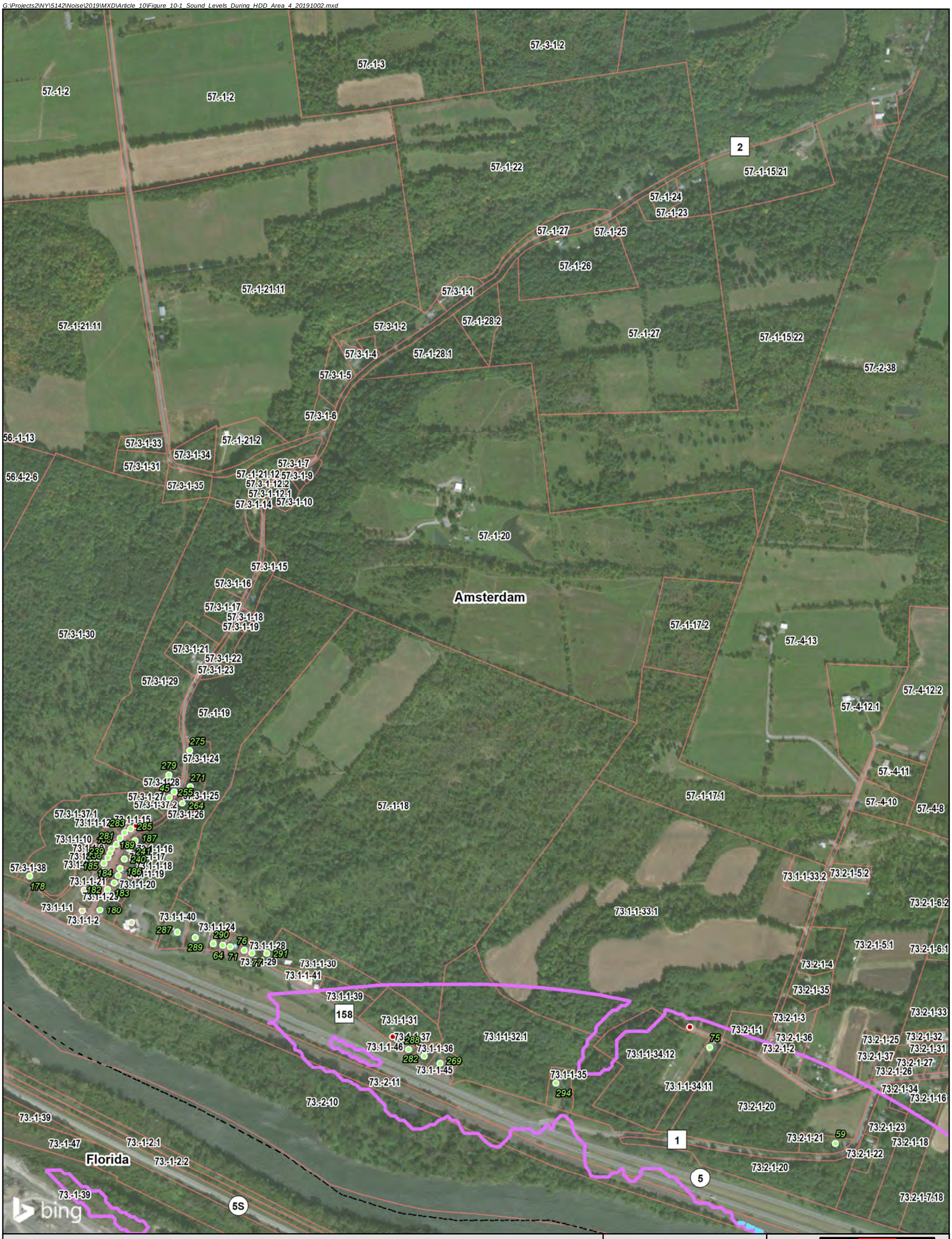


High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 29 of 34
Sound Levels During HDD - Area 4

G:\Projects2\NY\5142\Noise\2019\MXD\Article_10\Figure_10-1_Sound_Levels_During_HDD_Area_4_20191002.mxd

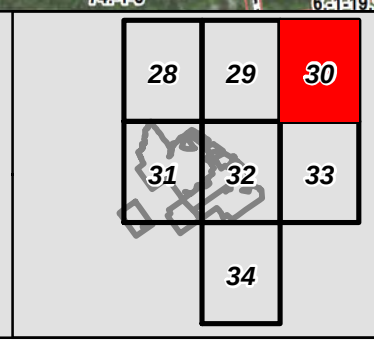
- Inverter
- Year-Round Residence
- Seasonal Residence
- Public
- Unknown
- Participating Parcel
- Non-Participating Parcel
- Project Boundary
- Array Panels
- HDD
- Laydown Yard
- Switchyard
- Control Houses
- Substation
- City/Town Boundary
- County Boundary

Predicted Sound Level (dBA)

- 35
- 40
- 45
- 50
- 55
- 60

Scale 1:8,403
1 inch = 700 feet

0 350 700 Feet



High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 30 of 34
Sound Levels During HDD - Area 4

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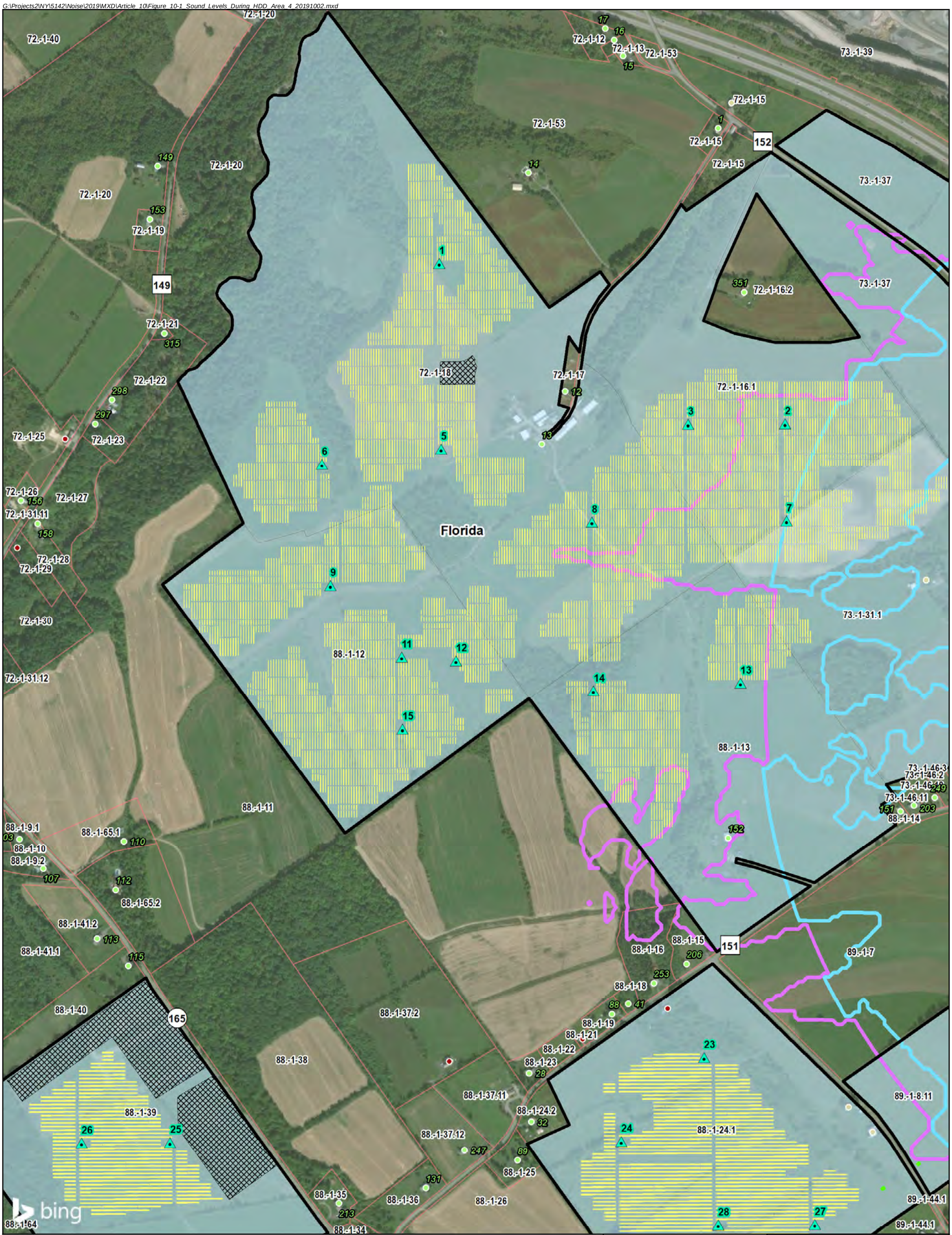

High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 31 of 34

Sound Levels During HDD - Area 4

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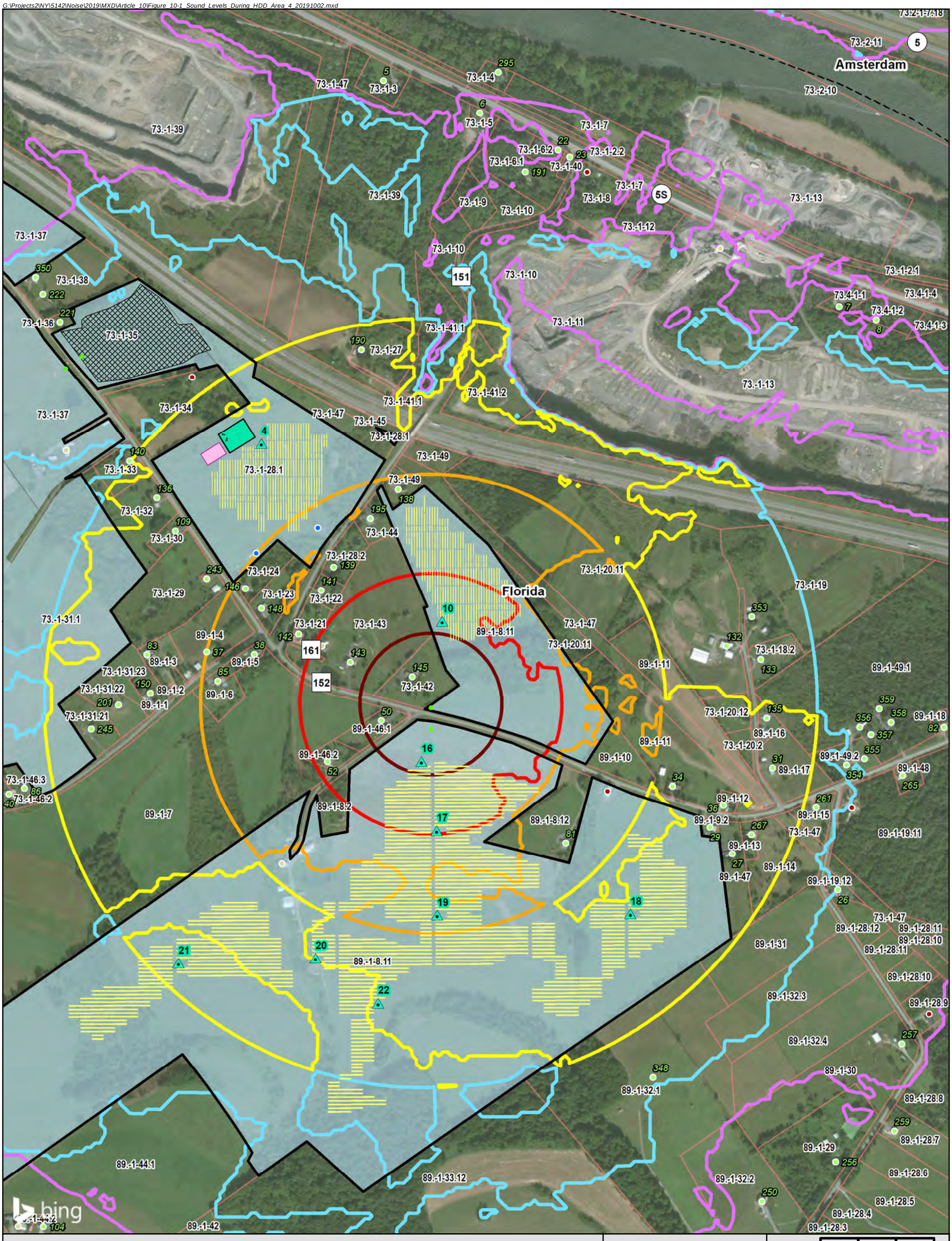

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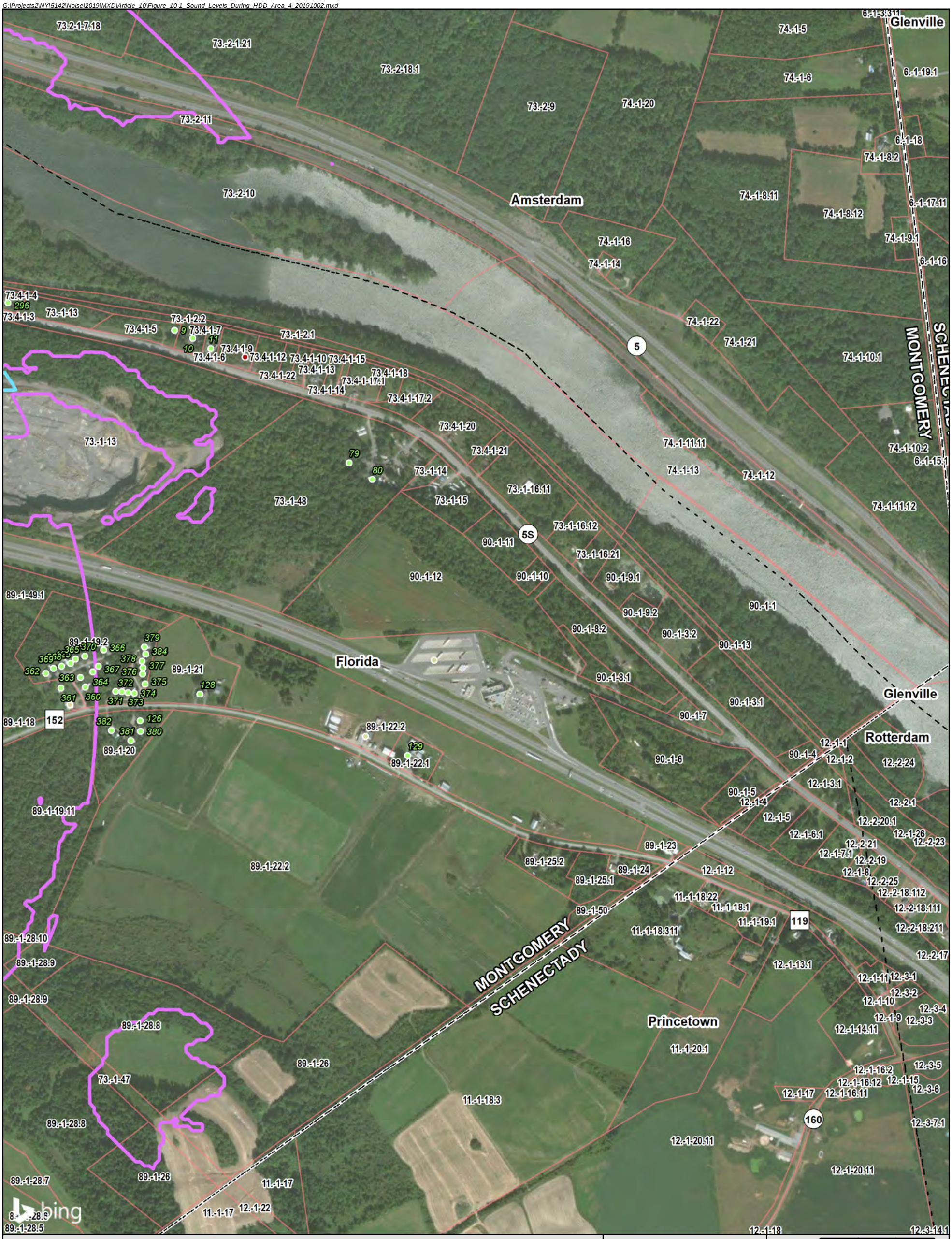

High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 33 of 34
Sound Levels During HDD - Area 4

G:\Projects2\NY\5142\Noise\2019\MXD\Article_10\Figure_10-1_Sound_Levels_During_HDD_Area_4_20191002.mxd

Inverter
Year-Round Residence
Seasonal Residence
Public
Unknown
Participating Parcel
Non-Participating Parcel
Project Boundary

Array Panels
HDD
Laydown Yard
Switchyard
Control Houses
Substation
City/Town Boundary
County Boundary

Predicted Sound Level (dBA)
35
40
45
50
55
60

Scale 1:8,403
1 inch = 700 feet
0 350 700
Feet

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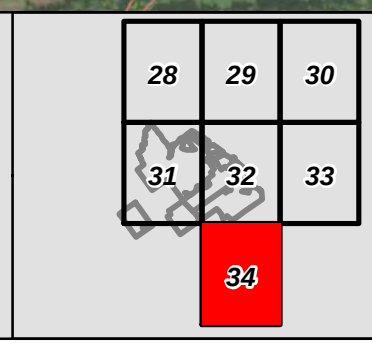

High River Solar **Montgomery County, New York**

Epsilon Associates Inc.

Figure 10-1, Map 34 of 34
Sound Levels During HDD - Area 4

Section 11.0

Other Potential Community Noise Impacts

11.0 OTHER POTENTIAL COMMUNITY NOISE IMPACTS

11.1 Hearing Damage

The Occupational Safety and Health Administration (OSHA) protects against the effects of noise exposure in the workplace through 29CFR1910.95. Permissible noise exposure levels for an 8-hour day are 90 dBA. At sound levels above 85 dBA over an 8-hour workday, employers shall provide hearing protection to employees.

The 1974 U.S. EPA "Levels" document[22] identifies a sound level of 70 dBA over a 24-hour period as protective against hearing loss from intermittent sources of environmental noise [$L_{eq(24)}$ = 70 dBA].

The "Guideline for Community Noise" (World Health Organization, Geneva, 1999) also identifies a sound level of 70 dBA over a 24-hour period as protective against hearing loss from a lifetime exposure to environmental noise [$L_{eq(24)}$ = 70 dBA].

According to the WHO 1999 Guidelines, the threshold for hearing impairment is 110 dBA (Lmax, fast) or 120/140 dBA (peak at the ear) for children/adults. The FHWA Highway Construction Noise Handbook (FHWA-HEP-06-015; August 2006) estimates construction blasting noise levels to be approximately 82 dBA at 200 feet (Lmax). The closest existing receptor to any Inverter foundation will be well beyond 200 feet. This would result in an Lmax sound level of less than 82 dBA at any receptor. These sound levels are well below the WHO hearing impairment threshold.

In addition, if any blasting is required, the contractor responsible for blasting will have a Health & Safety Plan approved by High River Energy Center. This Plan will include the appropriate worker hearing protection and procedures to prevent hearing loss from impulse noise.

11.2 Speech Interference

The 1974 U.S. EPA "Levels" document states that at an outdoor level of 55 dBA (L_{dn}) there is 100% sentence intelligibility indoors, and 99% sentence intelligibility at 1 meter outdoors. These are the maximum sound level below which there are no effects on public health and welfare due to interference with speech or other activity. This has a 5 dBA margin of safety – in other words the EPA believes the actual threshold is 60 dBA, but has reduced it by 5 dBA. An outdoor L_{dn} is equivalent to a 24-hour sound level of 49 dBA.

[22] Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, U. S. Environmental Protection Agency, 550/9-74-004, March 1974.

The "Guideline for Community Noise" (World Health Organization, Geneva, 1999) recommends an indoor sound level of 35 dBA (L_{eq}) to protect speech intelligibility. This is equivalent to approximately 50 dBA L_{eq} outdoors based on reduction from outside to inside by approximately 15 dBA with windows open, and 25 dBA with windows closed.[23]

11.3 Outdoor Public Facilities

The 1974 U.S. EPA "Levels" document identifies an outdoor level of 55 dBA (L_{dn}) requisite to protect the public health and welfare with an adequate margin of safety. This has a 5 dBA margin of safety – in other words the EPA believes the actual threshold is 60 dBA but has reduced it by 5 dBA. An outdoor L_{dn} is equivalent to a 24-hour sound level of 49 dBA.

11.4 Structural Damage

There is no blasting anticipated for the project. Information regarding construction activity and blasting activity (if necessary) will be included in the Preliminary Blasting Plan and the Preliminary Geotechnical Report and will be summarized in Exhibit 12 (Construction) and Exhibit 21 (Geology, Seismology, and Soils) of the Application. Blasting of bedrock is not expected to be required for construction of inverter, solar array panels or substation foundations and portions of the electrical interconnect lines. It is anticipated that pile driving will be utilized during portions of the construction of the project. Potential for any cracks or structural damage due to impact activities during construction will be analyzed in Exhibits 12 and 21.

11.5 Ground-Borne Vibration

Solar facilities do not produce significant levels of ground borne vibration, and therefore no analysis of ground borne vibration was conducted.

11.6 Air-borne Vibration

Table 11-1 shows the low frequency ANSI 12.2-2008 and ANSI S12.9-2005/Part 4 criteria. These data and the modeling procedures were discussed in Section 9.6. Modeling results at the 31.5 Hz and 63 Hz low frequency octave bands have been calculated using Cadna/A acoustic model. Results at the 16 Hz octave band, for each receptor were extrapolated from the 31.5 Hz results. The extrapolation for each is the difference between the sound power data at 16 Hz and the 31.5 Hz sound power data used for computer modeling. Modeling results show that the sound levels from the project will be well below 65 dB (16, 31.5, and 63 Hz) at all receptors. Complete octave band sound pressure level results at each receptor for the Project are presented in Appendix E.

[23] Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, U. S. Environmental Protection Agency, 550/9-74-004, March 1974.

Table 11-1 ANSI/ASA S12.2-2008 Section 6 and ANSI S12.9-2005/Part 4 Annex D Low Frequency Criteria Compared with Modeled Sound Levels at Worst-Case Receptors

Octave-band center frequency→	16 Hz	31.5 Hz	63 Hz
Low Frequency Guidelines			
Clearly perceptible vibration and rattles likely	75 dB	75 dB	80 dB
Moderately perceptible vibration and rattles likely	65 dB	65 dB	70 dB
Minimal annoyance levels	65 dB	65 dB	65 dB

11.7 Potential Interference with Technology

The potential of low-frequency noise, including infrasound and vibration, from operation of the Project to cause interference with the closest seismological and infrasound stations within 50 miles of the Project site was investigated. The Preparatory Commission for the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO) website was reviewed for the nearest location of any infrasound monitoring stations. The closest locations are in Bermuda (IS51) and Lac du Bonnet, Manitoba, Canada (IS10). Bermuda (IS51) is approximately 900 miles from the High River Energy Center, while Lac du Bonnet, Manitoba, Canada (IS10) is approximately 1,150 miles from the High River Energy Center. There are also some auxiliary seismic stations to monitor shock waves in the Earth as part of the CTBTO program. The nearest seismic monitor to the High River Energy Center is located in Sadowa, Ontario, Canada (AS014) which is approximately 280 miles away. Given these large distances and the relatively low levels of infrasound emissions from this project, we conclude there will be no impact to the CTBTO's ability to monitor infrasound. There are no US Geological Survey (USGS) seismological stations within 50 miles of the site. The nearest station is located at Binghamton, New York, approximately 100 miles to the southwest. The two nearest hospitals to the project are the St Mary's Amsterdam Hospital in Amsterdam, NY approximately 4.5 miles northwest of the nearest inverter, and Ellis Hospital in Schenectady, NY approximately 11.5 miles to the southeast of the nearest inverter. Distances are "as the crow flies."

11.8 Amplitude Modulation

Amplitude modulation is not a characteristic of noise sources such as those found at solar facilities. Neither the inverter nor the substation will produce noise capable of causing amplitude modulation; therefore, amplitude modulation is not applicable to this project.

11.9 Tonality

ANSI S12.9 Part 3, Annex B, section B.1 (informative) presents a procedure for testing for the presence of a prominent discrete tone. According to the standard, a prominent discrete tone is identified as present if the time-average sound pressure level (L_{eq}) in the one-third octave band of interest exceeds the arithmetic average of the time-average sound pressure level (L_{eq}) for the two adjacent one-third octave bands by any of the following constant level differences (K_T): 15 dB

in low-frequency one-third octave bands (from 25 up to 125 Hz); 8 dB in middle-frequency one-third octave bands (from 160 up to 400 Hz); or, 5 dB in high-frequency one-third octave bands (from 500 up to 10,000 Hz). A source of sound with a tone may be more annoying at the same A-weighted sound level than a source without a tone. Typically, the tone must be loud enough so that it is prominent, and thus annoying. The State of Illinois Pollution Control Board (IPCB) noise regulations recognize this fact by noting that their prominent discrete tone rule does not apply if the one-third octave band levels are 10 dB or more below the octave band limits in the IPCB regulations.

Sound pressure level calculations using the Cadna/A modeling software which incorporates the ISO 9613-2 standard is limited to octave band sound levels; therefore, a quantitative evaluation of one-third octave band sound levels using the modeling software was not possible. Instead, one-third octave band sound pressure levels due to the closest inverters were calculated at the nearest ten (10) potentially impacted and representative receptor locations using equations accounting for hemispherical radiation and atmospheric absorption. These receptors included both non-participants and participants. The calculations at these locations were conducted as discussed in Section 9.6 and similarly used the one-third octave band spectrum data for the calculations. The results presented in Table 11-2 shows that received sound pressure levels due to the closest inverters at each of these locations are not predicted to result in any prominent discrete tones as defined in the stipulations.

One-third octave band sound power levels for the substation transformer were not supplied by the vendor for the substation equipment; therefore, a quantitative evaluation of one-third octave band sound using the spreadsheet modeling approach was not possible. In general, substation transformers have the potential to create a prominent discrete tone at nearby receptors, specifically during the ONAN (fans off) condition. For this Project the substation is modeled to be less than 38 dBA at all non-participating sensitive receptors. Therefore, prominent discrete tones from the substation are not a concern with this Project.

Table 11-2 Tonal Analysis & Compliance Evaluation: Modeled Sound Pressure Levels

Rec. ID	One-Third Octave Band Center Frequency [Hz]	25	**31.5**	40	50	**63**	80	100	**125**	160	200	**250**	315	400	**500**	630	800	**1000**	1250	1600	**2000**	2500	3150	**4000**	5000	6300	**8000**	10000
	Tonal Limit	-	15	15	15	15	15	15	15	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	-
13	Received Sound Pressure Level (dB)	34	34	36	41	53	45	41	38	40	40	38	36	39	37	35	36	35	34	34	33	30	27	20	15	10	2	0
	Average Sound Pressure Level of Contiguous Bands	-	35	38	45	43	47	42	40	39	39	38	38	37	37	37	35	35	34	33	32	30	25	21	15	8	5	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	1	0	2	-1	0	1	-3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
32	Received Sound Pressure Level (dB)	32	32	34	39	51	43	39	36	38	38	36	34	37	35	33	34	33	32	31	30	28	25	17	13	8	0	0
	Average Sound Pressure Level of Contiguous Bands	-	33	36	42	41	45	40	38	37	37	36	36	35	35	34	33	33	32	31	30	28	23	19	13	6	4	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	1	0	2	-1	0	1	-3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
41	Received Sound Pressure Level (dB)	32	33	35	39	51	44	39	37	39	38	36	35	38	36	34	35	35	33	34	33	32	31	26	25	26	27	23
	Average Sound Pressure Level of Contiguous Bands	-	33.5	36.1	43.0	41.5	45.2	40.1	39.0	37.4	37.6	36.7	37.0	35.7	35.8	35.6	34.4	34.1	34.1	33.4	32.9	32.2	29.2	28.2	26.2	26.3	24.6	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
50	Received Sound Pressure Level (dB)	40	40	42	46	58	51	46	44	46	45	43	42	45	43	41	42	42	40	40	40	38	37	32	30	31	32	27
	Average Sound Pressure Level of Contiguous Bands	-	41	43	50	49	52	47	46	44	45	44	44	43	43	43	41	41	41	40	39	39	35	34	31	31	29	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
52	Received Sound Pressure Level (dB)	33	34	36	40	52	44	40	37	40	39	37	36	38	37	35	35	35	34	34	33	32	30	25	24	25	26	22
	Average Sound Pressure Level of Contiguous Bands	-	34	37	44	42	46	41	40	38	38	37	38	36	36	36	35	35	34	33	33	32	28	27	25	25	23	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-

Table 11-2 Tonal Analysis & Compliance Evaluation: Modeled Sound Pressure Levels (Continued)

Rec. ID	One-Third Octave Band Center Frequency [Hz]	25	**31.5**	40	50	**63**	80	100	**125**	160	200	**250**	315	400	**500**	630	800	**1000**	1250	1600	**2000**	2500	3150	**4000**	5000	6300	**8000**	10000
	Tonal Limit	-	15	15	15	15	15	15	15	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	-
84	Received Sound Pressure Level (dB)	35	35	37	42	54	46	41	39	41	41	39	38	40	39	37	37	37	36	36	36	35	34	29	28	29	30	26
	Average Sound Pressure Level of Contiguous Bands	-	36	39	45	44	48	43	41	40	40	39	39	38	38	38	37	37	37	36	36	35	32	31	29	29	27	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
145	Received Sound Pressure Level (dB)	36	36	38	43	55	47	42	40	42	42	40	39	41	40	38	38	38	37	37	37	36	35	30	29	30	31	27
	Average Sound Pressure Level of Contiguous Bands	-	37	40	46	45	49	44	42	41	41	40	40	39	39	39	38	38	38	37	36	36	33	32	30	30	28	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
206	Received Sound Pressure Level (dB)	32	32	34	39	51	43	38	36	38	38	36	34	37	36	33	34	34	33	33	33	31	30	25	24	25	27	22
	Average Sound Pressure Level of Contiguous Bands	-	33	35	42	41	44	39	38	37	37	36	36	35	35	35	34	33	33	33	32	31	28	27	25	26	24	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
219	Received Sound Pressure Level (dB)	31	31	33	38	49	42	37	35	37	36	34	33	36	34	32	33	33	31	32	31	30	29	24	23	24	25	21
	Average Sound Pressure Level of Contiguous Bands	-	32	34	41	40	43	38	37	36	36	35	35	34	34	34	32	32	32	31	31	30	27	26	24	24	23	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
253	Received Sound Pressure Level (dB)	32	33	34	39	51	43	39	36	39	38	36	35	37	36	34	35	35	33	34	33	32	31	26	25	26	27	23
	Average Sound Pressure Level of Contiguous Bands	-	33	36	43	41	45	40	39	37	38	37	37	36	36	35	34	34	34	33	33	32	29	28	26	26	25	-
	Difference between Sound Pressure Level and Contiguous Average	-	-1	-1	-4	10	-2	-1	-2	1	1	0	-2	2	0	-1	0	1	-1	0	0	0	2	-2	-1	0	3	-
	Below Tonal Limit?	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-

Section 12.0

Evaluation

12.0 EVALUATION

12.1 Local Laws

There are no local laws with sound limits applicable to this project.

12.2 Long-Term Sound Levels (Goal #1, #2)

The results of the annual nighttime $L_{eq,\ night,\ outside,}$ sound level modeling results are summarized in Table F-1 in Appendix F. Annual nighttime $L_{eq,\ night,\ outside}$ Project sound levels at modeling receptors range from 39 dBA and lower. Therefore, the project meets the design goal of 40 dBA or less (non-participating) and 50 dBA (participating) as an annual $L_{eq,\ night,\ outside}$ level.

12.3 Short-Term Sound Levels (Goals #3, #4)

The 1-hour L_{eq} sound levels at all modeling receptors with the two sound barrier walls range from 14 dBA to 44 dBA. The highest sound level for a participating receptor is 44 dBA, and the highest sound level for a non-participating receptor is 42 dBA. Therefore, the project meets the 1-hour L_{eq} design goal of 42 dBA (non-participating) and 52 dBA (participating).

12.4 Property Line (Goal #5)

Figure 9-2, and all inset maps, show that short-term 1-hour L_{eq} sound levels at all property lines between participating land and non-participating land are less than 55 dBA. Therefore, the Project meets the 1-hour L_{eq} design goal of 55 dBA for property lines.

12.5 Tonality (Goal #6)

As discussed in Section 12.9, ANSI S12.9 Part 3, Annex B, section B.1 (informative) presents a procedure for testing for the presence of a prominent discrete tone. The results presented in Table 11-2 show that received sound pressure levels due to the closest inverters are not predicted to result in any prominent discrete tones at either participating or non-participating residents. For this Project the collector substation is modeled to be less than 38 dBA at all non-participating sensitive receptors. Therefore, prominent discrete tones from the substation are not a concern with this Project. The project thus meets the design goal of no pure tone at any non-participating resident.

12.6 Low Frequency Sound (Goal #7)

Annex D of the American National Standard ANSI S12.9-2005/Part 4 identifies that low frequency sound annoyance is minimal when the 16, 31.5 and 63 Hz octave band sound pressure levels are each less than 65 dB. As shown in Appendix E, the highest sound level modeled in the 16, 31.5, or 63 Hz octave bands at a modeling receptor is 57 dB, well below the 65 dB design goal. Therefore, the project meets the design goal of less than 65 dB for the 16, 31.5 and 63 Hz octave bands.

12.7 Summary of Compliance

Table 12-1 summarizes all design goals applicable to the High River Energy Center, and the compliance status with said goals.

Table 12-1 Summary of Compliance with Sound Standards and Design Goals – High River Energy Center

#	Design Goal. (Not to exceed)	Assessment Location	Noise descriptor	Period of Time	Participant Status	Meet?
1	40 dBA	At residence, Outdoor	Lnight-outside (Leq)	Annual; nighttime. (2009-WHO)	Non-participant	Yes
2	50 dBA	At residence, Outdoor	Lnight-outside (Leq)	Annual; nighttime. (2009-WHO)	Participant	Yes
3	42 dBA	At residence, Outdoor	Leq	1-hour; daytime or nighttime	Non-participant	Yes
4	52 dBA	At residence, Outdoor	Leq	1-hour; daytime or nighttime	Participant	Yes
5	55 dBA	Property line except for portions delineated as wetlands	Leq	1-hour; daytime or nighttime	Non-Participant	Yes
6	No audible prominent tones or 5 dBA penalty if they occur	At residence, Outdoor	Leq	1-hour; daytime and nighttime	Non-participant	Yes
7	65 dB at 16, 31.5, and 63 Hz full-octave bands	At residence, Outdoor	Leq	1-hour; daytime and nighttime	Non-participant	Yes

Section 13.0

Conclusions

13.0 CONCLUSIONS

Potential broadband, octave band, one-third octave band, low frequency, and infrasound from the High River Energy Center were examined. Noise design goals for each of these elements were selected based on applicable regulations and guidelines. Based on the detailed analyses presented in this report, the future project sound levels will meet all of the design goals with respect to sound.

These levels do not mean the project sound will be inaudible or completely insignificant, only that its noise will generally be low enough that it will probably not be considered objectionable by the vast majority of neighbors. Therefore, at this stage of permitting, adverse impacts from noise and vibration from the construction and operation of the High River Energy Project have been avoided or mitigated to the maximum extent practicable.

Appendix A
Windscreen Insertion Loss

Experimental study to determine wind-induced noise and windscreen attenuation effects on microphone response for environmental wind turbine and other applications

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(Received: 23 February 2008; Revised: 30 May 2008; Accepted: 31 May 2008)

Despite the use of windscreens, the measurement of ambient sound levels or noise emissions in quiet environments can be adversely affected by wind blowing over the microphone. This is especially true when environmental impact assessments are being carried out for proposed wind turbine power projects - where the objective is to determine the level of background masking noise available as a function of wind speed, since any potential noise impact from the project will only occur under moderately windy conditions. Under calm conditions the project will produce no noise at all. A number of windscreen products are commercially available for short and long-term sound level monitoring in adverse weather conditions. Generally, these windscreens vary by physical size and the method of preventing water from reaching the microphone. High frequency attenuation effects are usually available from the product suppliers but, in general, low frequency turbulence effects are not available. Consequently, a controlled laboratory test program was carried out in a state-of-the-art wind tunnel at the Fraunhofer Institut für Bauphysik in Stuttgart, Germany to quantify the level of low frequency interference (down to 6.3 Hz) associated with a number of different foam windscreens and an aerodynamic microphone nose cone. A total of nine configurations were tested with "quiet" airflow only, artificial noise only and noise plus airflow to evaluate both low frequency wind induced noise and high frequency attenuation effects. The test program demonstrated that the largest size foam-based windscreens provided the most protection from flow induced noise due to wind. Flow induced noise by air flow alone was estimated from the study results and compared to community noise measurements at a typical wind turbine site. It was determined that flow induced wind noise does not have a significant or detrimental effect on the measurement of A-weighted sound levels under wind conditions of concern as long as the suggested measurement techniques described herein are followed.

Primary subject classification: 71.1.1; Secondary subject classification: 21.6

1 INTRODUCTION

It is a challenge to measure ambient or background levels in quiet, rural environments. Such areas are usually devoid of any major noise sources, such as highways, industrial facilities or airports. Except for occasional, usually man-made, noise events the sound level in rural environments is normally dominated by the rustling of tree leaves or branches in the wind or by the high frequency sounds of insects during the warmer months of the year. For wind turbine power project assessments, ambient sound levels when the wind is blowing in the 3 to 10 m/s range (measured at 10 m above the surface) is very relevant because that is when typical wind turbines first begin to generate significant noise. At higher wind speeds turbine sound levels remain largely constant while the background sound continues to increase. Consequently, background sound

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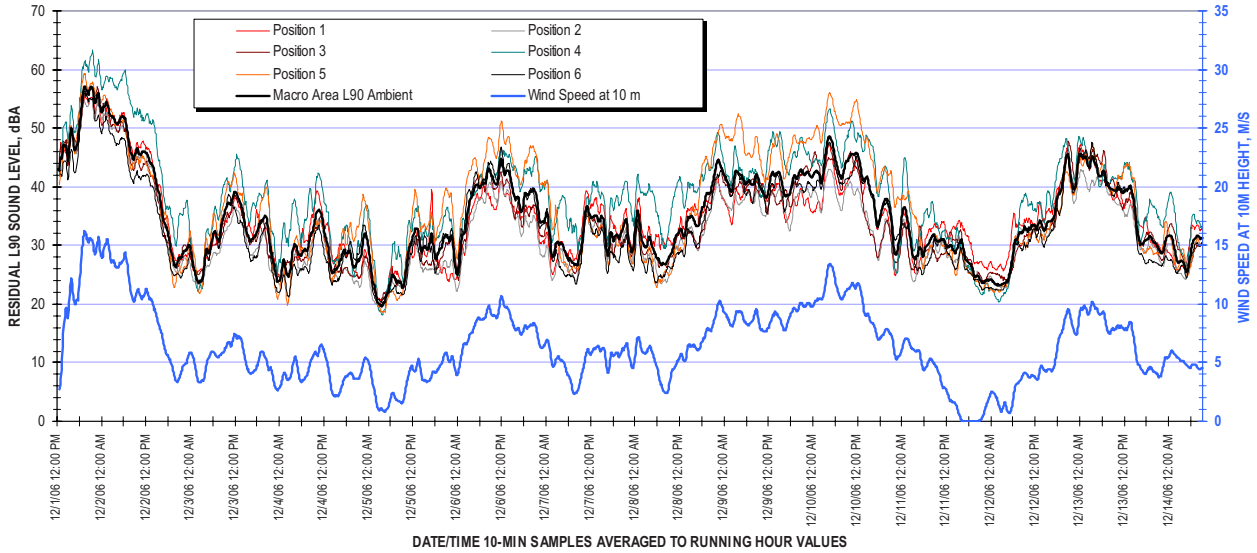

Fig. 1—Measured residual LA90 ambient sound levels at six widely spaced locations in a quiet rural area compared to wind speed over a 13 day period.

levels that occur during moderate winds are of the most interest. Reference 1 offers techniques for measuring wind turbine sources using a ground plane microphone setup to eliminate wind induced noise, but background baseline measurements are made above grade with wind.

In general, experience with (insect-free) wintertime surveys at rural sites indicates that there is normally an

Fig. 2—Photographs of nine microphone test configurations.

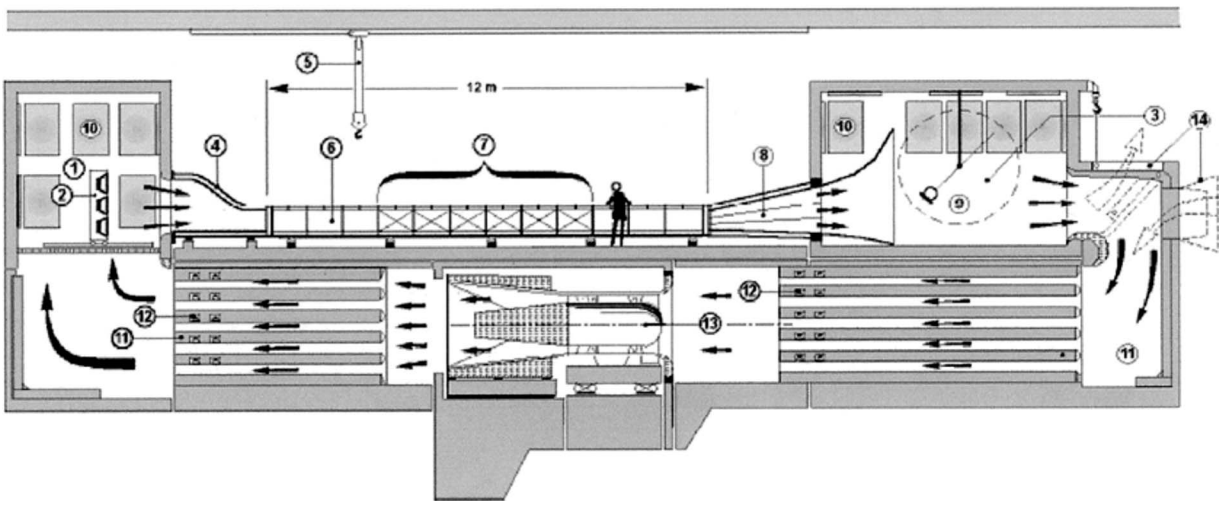

Fig. 3—Cross sectional elevation view of silencer test facility.

excellent correlation between wind speeds and the ambient residual (L90) sound levels as shown on Fig. 1. Of course, such a high degree of correlation could result if the microphone response was dominated by wind-induced turbulence effects around the microphone as opposed to the true ambient sound level signal. Hence, the purpose of this study is to quantitatively address this uncertainty and determine, for a number of common windscreens types, if/when any substantial contamination occurs over a range of wind speeds.

Nine microphone configurations, as illustrated in Fig. 2, were tested under controlled conditions in a wind tunnel duct using quiet airflow only, artificial noise only (at three volumes) and airflow plus artificial noise. Ninety degree incidence is used to duplicate ambient sound measurement survey techniques, but the nose cone (B&K model UA 0386) was aimed into the flow stream. Windscreens for tests 3, 4, 8 and 9 are products available for long-term outdoor monitoring. The foam ball ACO Pacific models (tests 8 and 9) are specifically treated to shed rain water while the other foam balls are not intended for outdoor rain exposure. Measurements were carried out at duct velocities of 2.5, 5, 10, 20 and 30 m/s (8, 16, 33, 66 and 98 ft/s, or 6, 11, 22, 45 and 67 mph). The test results are also useful for determining flow turbulence effects when measuring industrial noise sources in the presence of airflow, as well as for outdoor environmental measurements.

The test program was carried out at the Fraunhofer Institute of Building Physics located in Stuttgart, Germany at their aero-acoustic wind tunnel illustrated on Fig. 3. Note the large silencers on the inlet and exhaust path of the airflow fan and the structural isolation of the test duct. The airflow delivered to the duct test section is essentially free of fan noise or is "quiet" air. The airflow in the duct cross section has an even distribution without swirl or turbulences as it is supplied through a stilling chamber and an air inlet profile. The duct cross section of 1 m by 0.5 m was held constant over the complete length for all measurements. In this way re-generated noise was kept at a minimum. Measurements were made with a Norsonic 840 Analyzer, Norsonic Model 1201 preamp and 1/2 inch (13 mm) diameter Model 1225 microphone.

2 LOW FREQUENCY TURBULENCE EFFECTS - FLOW MEASUREMENTS

The raw measured data for all configurations at the five airflow speeds are plotted on Fig. 4. It is certainly not news, but the data clearly demonstrate that even the most modest foam windscreen should always be used when outdoors, since it dramatically improves the low and mid frequency microphone response. Because the extreme low frequencies are significantly affected by flow induced noise even at fairly low wind speeds, these plots also show that whenever low level very low frequency or C-weighted sound levels must be measured outdoors such measurements should only be carried out under completely calm conditions.

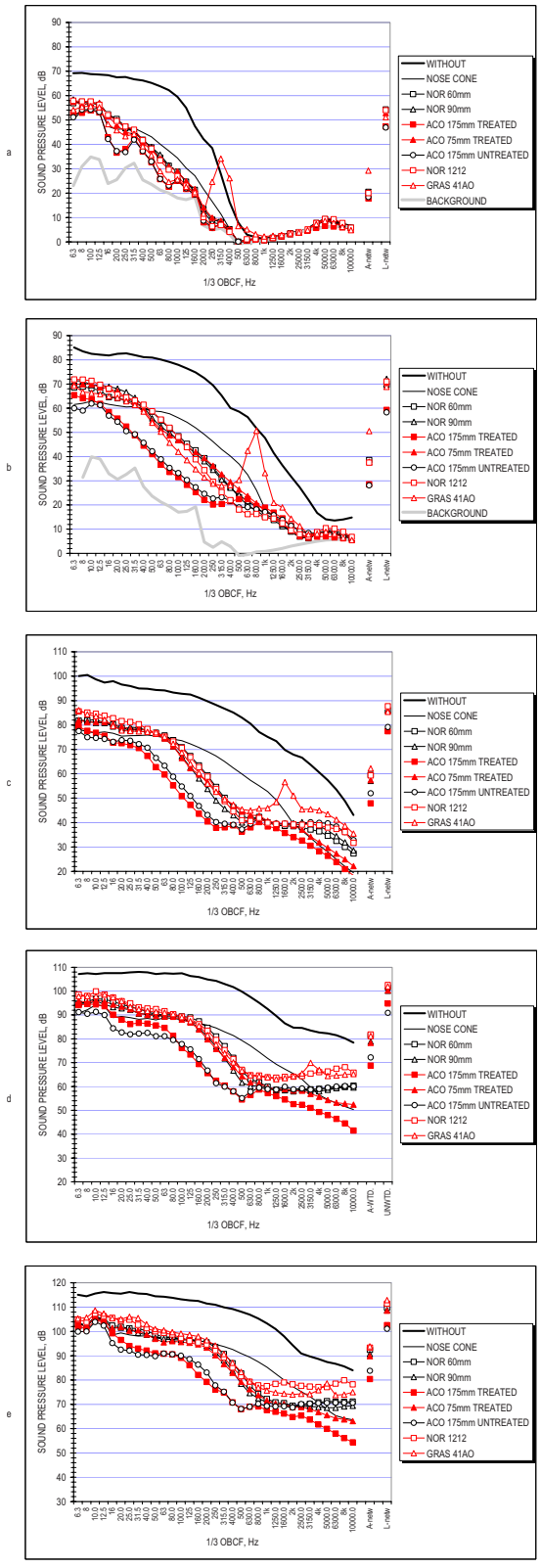

Fig. 4—Measured microphone response at five velocities (2.5, 5. 10, 20 and 30 m/s*, graph a through e).*

The second trend immediately noticeable is that the two larger (175 mm diameter) windscreens are significantly better at reducing flow induced noise at low and

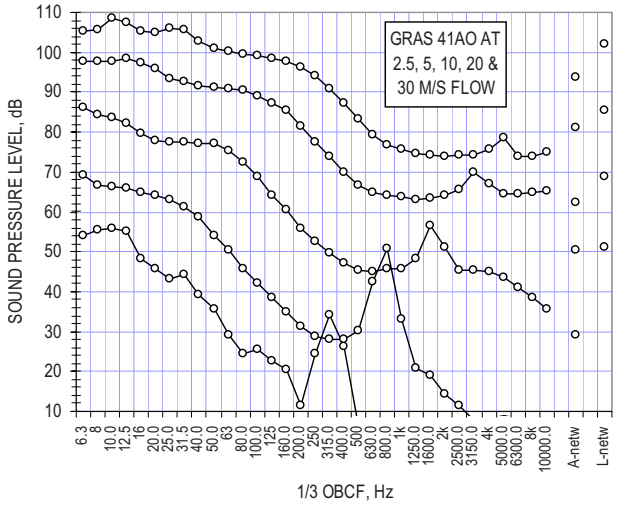

Fig. 5—Graph showing flow generated tonal noise associated with the gap between foam and wire.

mid frequencies. Flow-induced noise levels are on the order of 10 dB lower for this type of windscreen than they are for all others. Prior studies have shown this relationship and an excellent analytical study and summary of microphone response to turbulence is presented by van den Berg in Ref. 2. This testing quantifies the improvement and low frequency performance for readily available current wind protection products.

All of the plots, but particularly the lower wind speed cases, show a tonal aberration for the GRAS model 41AO windscreen. A frequency shift with wind velocity can clearly be seen in Fig. 5, which shows only the results for this model windscreen at all five wind speeds. This behavior was initially attributed to vortex shedding from the bird spike wires (each 1.5 mm in diameter) where the frequency may be calculated by the well known equation:

$$f = Sv/d \qquad (1)$$

where,
S=the Strouhal number of 0.2
v=velocity, m/s
d=diameter, m

This calculation indicated that the 315, 630, 1250, 2500 and 5000 Hz 1/3 octave bands would be excited by vortex shedding, but the actual measurements showed that the affected bands were 315, 800, 1600, 3150 and 5000 Hz. Further diagnostic testing demonstrated that the peaks are caused by the gap between the

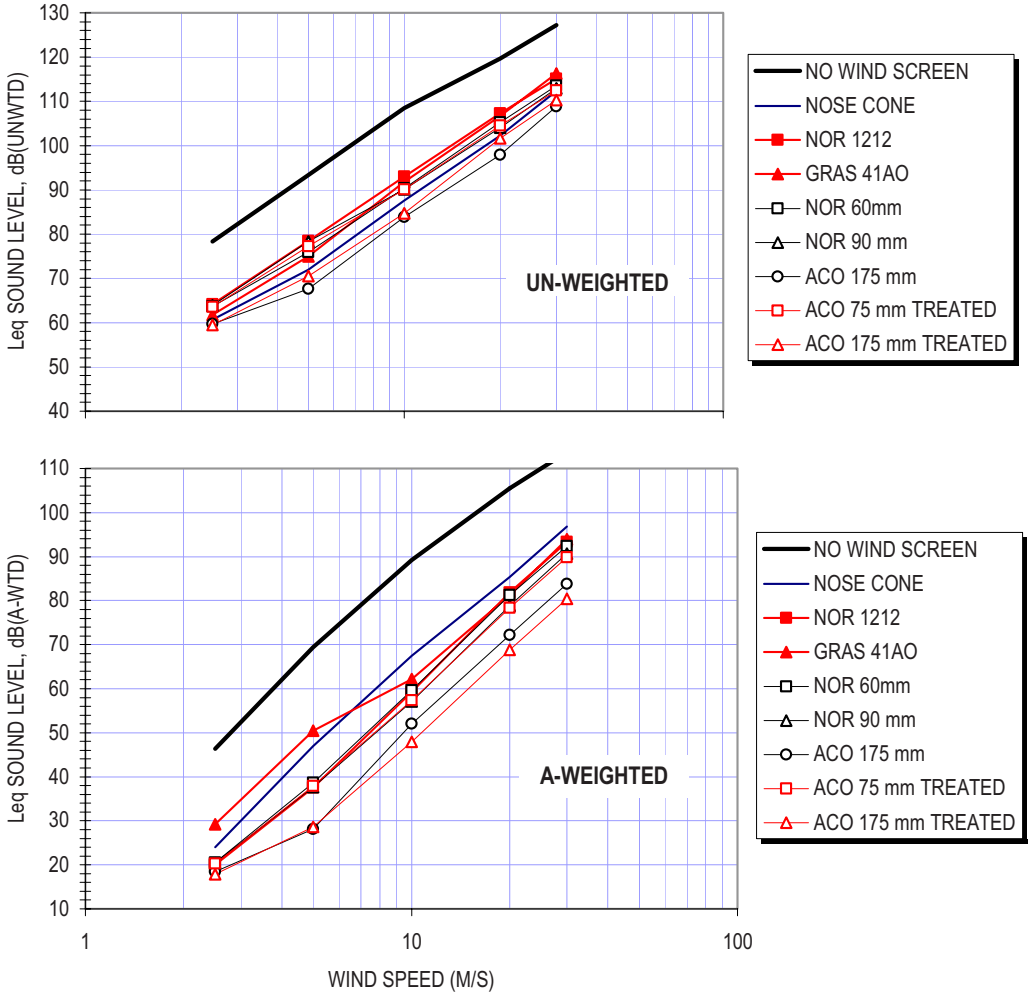

Fig. 6—Plot of overall flow noise response for windscreen models. Upper: Un-weighted level, Lower: A-weighted level.

wire bird spike base and the top of the windscreen. Apparently small mini-jets are created by this gap and it was found that this noise could be reduced by a closer fit between the foam screen and the wire. The gap should be eliminated when employing this model for monitoring.

Figure 6 plots the overall measured values of flow-generated noise as a function of air flow velocity. When plotted on a logarithmic scale, the data show a linear increase with velocity for all models. The overall, un-weighted sound level slope is a v^5 relationship, or approximately a 15 dB increase for each doubling of velocity, whereas the A-weighted results are a v^6 relationship, or approximately 18 dBA increase per doubling. Table 1 tabulates the overall measured values at each velocity for each model windscreen. These data can be used to derive a logarithmic expression for the self-generated noise level as a function of wind speed for any of the tested windscreens. For example, data for the treated ACO 175 mm windscreen leads to the following approximate equation for estimating the A-weighted flow induced noise level for the wind speed at the microphone location. Wind speed at 10 m elevation is the standardized elevation for rating wind turbines as given in Ref. 1 but this equation applies at the microphone location.

$$L_{fin} = 27.4 \ln(v) - 10.7, \text{ dBA} \qquad (2)$$

where,

L_{fin}=the A-weighted flow-induced-noise level due only to wind

v=the wind speed at the microphone, m/s

Table 1—Measured overall levels for microphone response with and without windscreens at five velocity settings. Lowest response results are for the 175 mm *size windscreens.*

		FLOW SPEED M/S (MPH)				
A-WTD		2.5	5	10	20	30
T1	NO WIND SCREEN	46	69	89	106	114
T2	NOSE CONE	24	47	68	85	97
T3	NOR 1212	20	38	59	82	93
T4	GRAS 41AO	29	51	62	81	94
T5	NOR 60 mm	21	39	60	81	92
T6	NOR 90 mm	20	38	57	79	91
T7	ACO 175 mm	18	28	52	72	84
T8	ACO 75 mm TREATED	20	38	57	78	90
T9	ACO 175 mm TREATED	18	29	48	69	80
UNWTD		FLOW SPEED M/S (MPH)				
		2.5	5	10	20	30
T1	NO WIND SCREEN	78	93	109	120	127
T2	NOSE CONE	61	72	88	102	112
T3	NOR 1212	64	79	93	107	115
T4	GRAS 41AO	62	75	92	107	116
T5	NOR 60 mm	64	76	90	105	114
T6	NOR 90 mm	64	78	90	104	113
T7	ACO 175 mm	60	68	84	98	109
T8	ACO 75 mm TREATED	64	77	90	105	113
T9	ACO 175 mm TREATED	60	71	85	102	110

3 ATTENUATION EFFECTS – ARTIFICIAL NOISE MEASUREMENTS

The measured sound levels in the duct at three volumes of artificial loud speaker noise (without any airflow) are plotted in Fig. 7. The fairly significant response variances at frequencies below 50 Hz are attributable to longitudinal in-duct resonances. Variable levels of external low frequency background noise outside the test duct at the facility may have also contributed to the scatter and loudspeaker output is poor at frequencies below 20 Hz. An improved signal to background noise ratio is suspected as the reason for better data grouping at the highest volume. There is no reason to believe that windscreens have any attenuation or amplification effects at these low frequencies. To verify this, testing was repeated in the facilities anechoic free-field environment. Figure 8 plots the raw data for this test and it is readily apparent that the low frequency variations are absent for a free progressive wave in an anechoic room as opposed to the wave front in a duct containing lateral reflections.

At the high end of the frequency spectrum the plots consistently show the same, model-dependent trends such as the significant attenuation of the ACO 175 mm treated windscreen at all frequencies above about 1250 Hz. Figure 9 shows the averaged attenuation for the three volumes in 1/3 octave bands for all windscreen models tested. Negative attenuation, or amplification of the signal, is significant for the nose cone and Nor 1212 outdoor windscreen. Table 2 tabulates the measured attenuations.

In general, the relatively large high frequency attenuation associated with the ACO 175 mm treated windscreen means that any un-corrected measurements made with it would be somewhat lower on an overall A-weighted basis than the actual value and therefore conservative in background survey applications. The overall noise reduction of this windscreen would depend on the frequency spectrum shape of the sound being measured but appears to be in 2 to 5 dBA range (neglecting any possible counteracting increases due to wind-induced effects). This low-pass filter quality could actually be beneficial in cases where unwanted summertime insect noise (generally above 2 kHz) is present. This contamination would be automatically

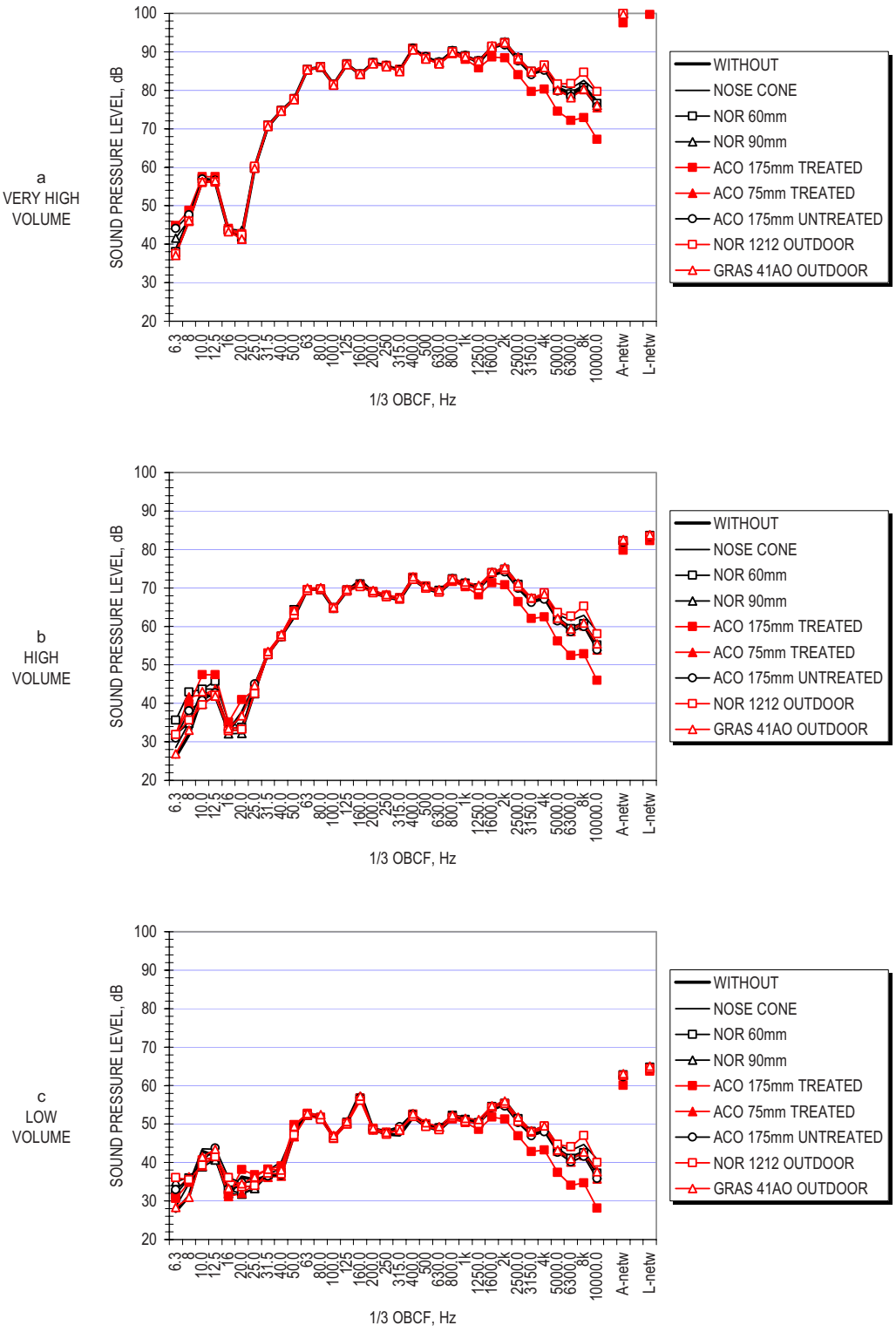

Fig. 7—Measured response with three volumes of artificial noise in the duct.

minimized, though not necessarily eliminated, through the use of this windscreen

4 FLOW AND NOISE MEASUREMENTS

The combined flow and noise measurements serve to illustrate the accuracy of the measurements and the benefits of using windscreens. Figure 10 plots the flow only, noise only and the combined flow and noise measurements for three cases: no windscreen, minimum diameter and maximum diameter foam windscreens. The point where the flow only and noise only traces cross essentially defines the minimum

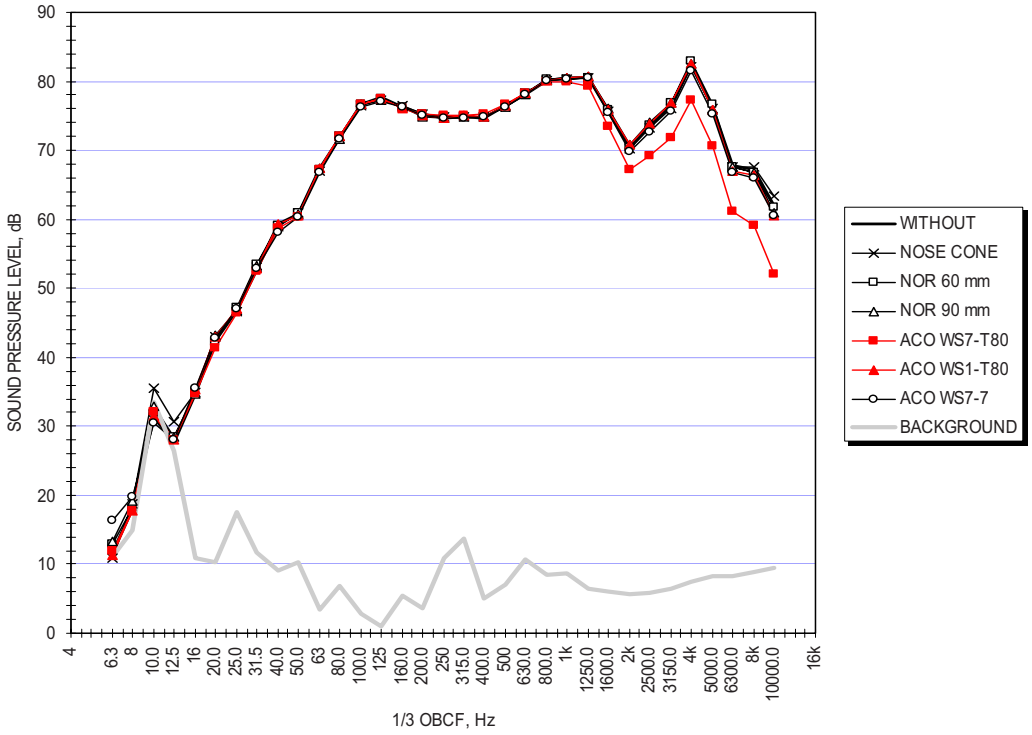

Fig. 8—Measured sound pressure spectra for five windscreen models in an anechoic chamber.

frequency at which valid data can be measured during, in this case, a 10 m/s wind. Without a windscreen, almost the entire spectrum (0 to 6300 Hz) is dominated by the 10 m/s flow noise. At the same 10 m/s flow speed; however, accurate measurements can be made in all bands above 125 Hz using only a 60 mm windscreen. The frequency response is improved to above 50 Hz using the largest (175 mm) windscreen.

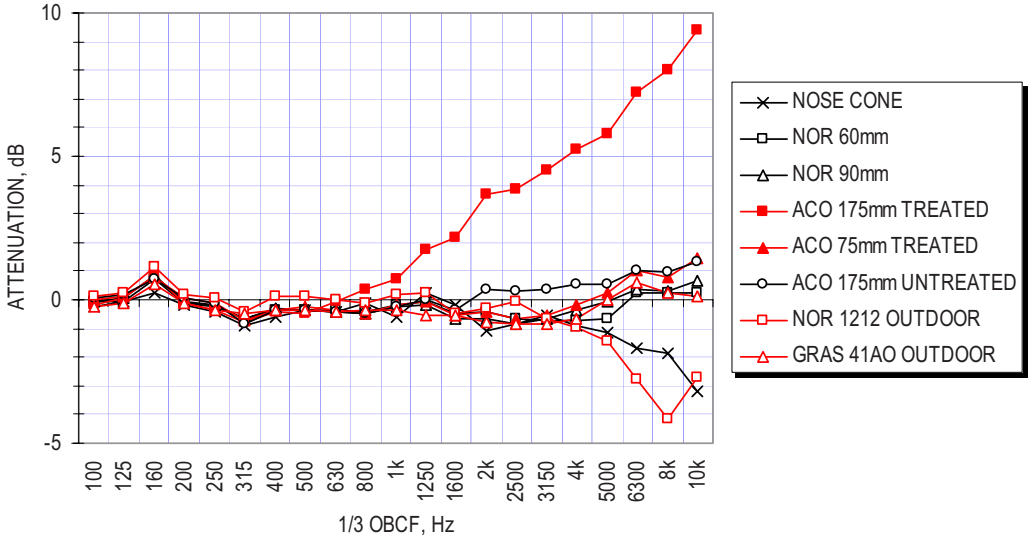

Fig. 9—Measured microphone response attenuation for windscreen models for 90 degree sound incidence.

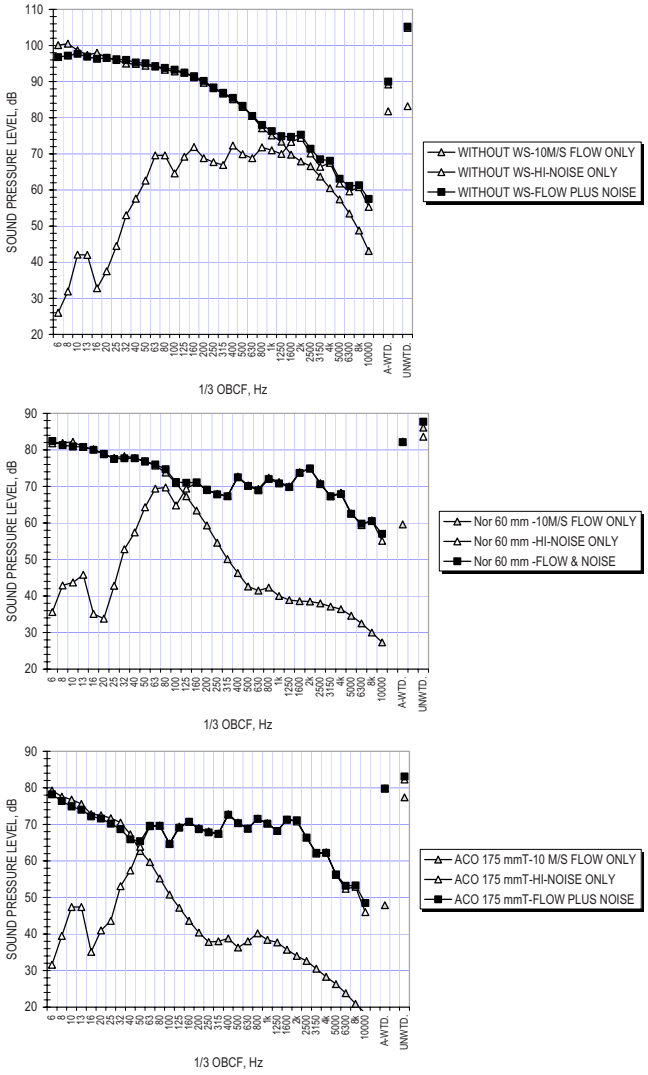

Fig. 10—Flow only, noise only and flow and noise measurements.

5 CONCLUSIONS AND RECOMMENDATIONS

The data show that reasonably good results when measuring in low to moderate wind conditions are possible even with conventional 60 mm windscreens, but that a larger (175 mm) diameter windscreen offers significantly better performance in the lower frequencies.

In the special case of background sound level surveys for wind turbine projects, where the objective is to determine the environmental sound level/masking level as a function of wind speed, the suggested practice based on this lab study is to use a large 175 mm windscreen and mount the microphone at a maximum elevation of about 1 m above grade. This latter step helps ensure that the microphone is exposed to relatively low wind speeds, since the nominal wind velocity profile, Eqn. (7) in Ref. 1 has a parabolic shape where the velocity decreases rapidly near the ground – theoretically going to zero at the surface. For example, a wind speed of 10 m/s (22.4 mph) measured at a standardized elevation of 10 m would translate to a nominal speed of 5.6 m/s (12.5 mph) at only 1 m above the surface. The wind speed range of most relevance to wind turbine analyses is usually in the 5 to 8 m/s range as measured at 10 m; consequently, a microphone at 1 m would be exposed to nominal flow velocities of 2.8 m/s (6.3 mph) to 4.5 m/s (10.1 mph) where the A-weighted flow induced noise levels would

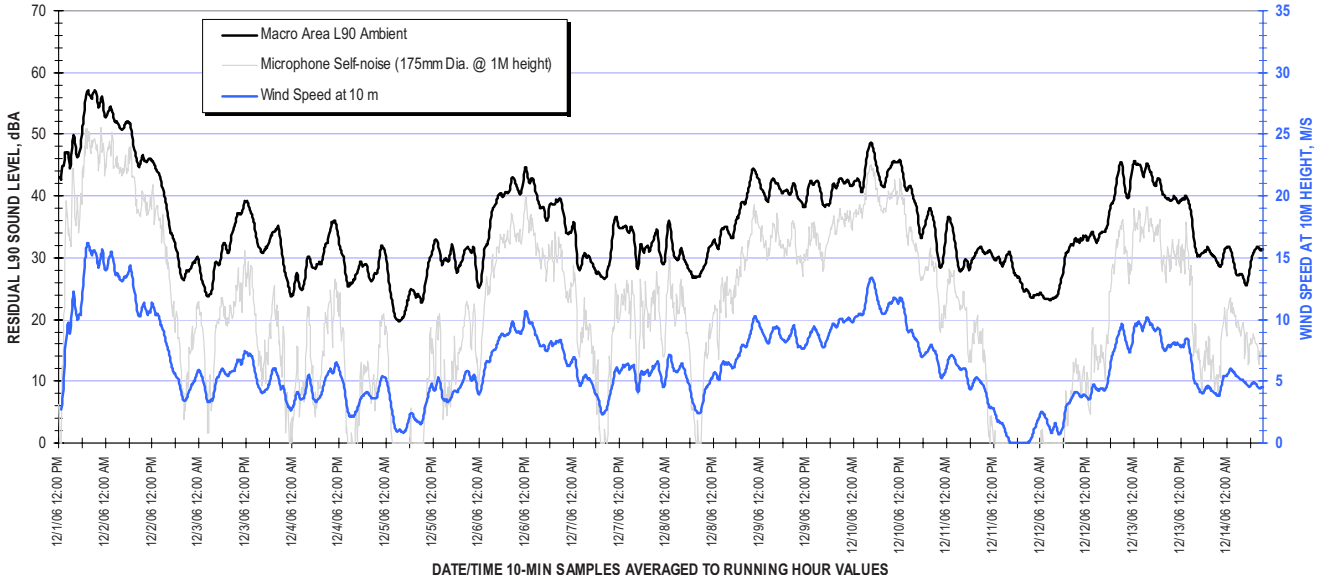

Fig. 11—Measured community ambient level compared to estimated microphone response to wind.

Table 2—Measured attenuation for windscreen models, 90 degree sound incidence.

1/3 OBCF, Hz	NOR 60 mm	NOR 90 mm	ACO 175 mm TREATED	ACO 75 mm TREATED	ACO 175 mm UNTREATED	NOR1212 OUTDOOR	GRAS41AO OUTDOOR	NOSE CONE
100	0.0	−0.1	−0.2	0.0	0.1	0.1	−0.2	−0.2
125	−0.1	0.1	0.1	0.1	0.2	0.3	−0.1	−0.1
160	0.7	0.9	0.8	0.8	0.7	1.2	0.5	0.2
200	−0.1	0.0	−0.1	0.0	0.1	0.2	−0.1	−0.2
250	−0.2	−0.2	−0.4	−0.1	−0.1	0.0	−0.3	−0.4
315	−0.7	−0.6	−0.8	−0.7	−0.8	−0.4	−0.5	−0.9
400	−0.4	−0.3	−0.4	−0.3	−0.4	0.1	−0.4	−0.6
500	−0.3	−0.3	−0.5	−0.2	−0.3	0.1	−0.3	−0.3
630	−0.4	−0.4	0.0	−0.4	−0.4	0.0	−0.4	−0.4
800	−0.4	−0.5	0.4	−0.5	−0.5	−0.1	−0.3	−0.1
1K	−0.2	−0.2	0.7	−0.2	−0.2	0.2	−0.3	−0.6
1250	0.0	−0.2	1.8	−0.1	0.0	0.3	−0.5	0.3
1600	−0.5	−0.6	2.2	−0.6	−0.3	−0.5	−0.6	−0.2
2K	−0.4	−0.7	3.7	−0.4	0.3	−0.3	−0.8	−1.1
2500	−0.6	−0.8	3.8	−0.7	0.3	0.0	−0.8	−0.8
3150	−0.7	−0.6	4.5	−0.5	0.3	−0.7	−0.8	−0.6
4K	−0.7	−0.3	5.3	−0.2	0.5	−1.0	−0.7	−0.9
5K	−0.6	−0.1	5.8	0.2	0.6	−1.5	0.0	−1.1
6300	0.2	0.3	7.2	1.0	1.0	−2.8	0.6	−1.7
8K	0.2	0.3	8.0	0.8	1.0	−4.1	0.2	−1.9
10K	0.3	0.7	9.4	1.5	1.3	−2.7	0.1	−3.2

range from 18 to 31 dBA. Such levels are low to insignificant even compared to the quiet environmental sound levels that commonly exist in rural areas.

As an example, the self-noise sound levels associated with the field data illustrated in Figure 1 have been calculated from Eqn. (2) above (based on the 10 m wind data converted to 1 m) and used to correct the sound levels actually measured. The measured and corrected sound levels are plotted in Fig. 11. Since the microphone flow induced noise response alone is frequently 8 to 10 dBA below the measured levels, the adjustment is minimal in most instances (=< 0.5 dBA) and therefore considered insignificant.

6 ACKNOWLEDGEMENTS

The author wishes to acknowledge both the technical and financial assistance provided by the Norsonic in Germany, Scantek, Inc., GRAS and ACO Pacific in the U.S.

7 REFERENCES

1. International Standard IEC 61400-11, *Wind turbine generator systems – Part 11: "Acoustic noise measurement techniques"*, 2nd edition 2002–12, (2002).
2. G. P. van den Berg, "The sound of high winds: the effect of atmospheric stability on wind turbine sound and microphone noise." Ph.D. Thesis, National University of Groningen, The Netherlands, (2006).

Appendix B

Certificates of Sound Level Instrument Calibration

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.40878

Instrument:	**Sound Level Meter**
Model:	**831**
Manufacturer:	**Larson Davis**
Serial number:	**0001992**
Tested with:	**Microphone 377B20 s/n 112340** **Preamplifier PRM831 s/n 015258**
Type (class):	**1**
Customer:	**Epsilon Associates, Inc.**
Tel/Fax:	**978-897-7100 /**

Date Calibrated: **6/13/2018** *Cal Due:* **6/13/2019**

Status:	**Received**	**Sent**
In tolerance:	**X**	**X**
Out of tolerance:		
See comments:		

Contains non-accredited tests: **__Yes _X_ No**
Calibration service: **___ Basic _X_ Standard**
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
21.4	99.77	48.2

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E. Marshall
Date	6/13/2018	Date	6/13/2018

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES[1] FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT[2,3]	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - IEC61672-3 ED.2 CLAUSE 10	Passed	0.15
SELF-GENERATED NOISE - IEC 61672-3 ED.2 CLAUSE 11	Passed	0.30
FREQUENCY WEIGHTINGS: A NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: C NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: Z NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY AND TIME WEIGHTINGS AT 1 KHZ IEC 61672-3 ED.2.0 CLAUSE 14	Passed	0.20
LEVEL LINEARITY ON THE REFERENCE LEVEL RANGE - IEC 61672-3 ED.2 CLAUSE 16	Passed	0.25
LEVEL LINEARITY INCLUDING THE LEVEL RANGE CONTROL - IEC 61672-3 ED.2.0 CLAUSE 17	Passed	0.25
TONEBURST RESPONSE - IEC 61672-3 ED.2.0 CLAUSE 18	Passed	0.30
PEAK C SOUND LEVEL - IEC 61672-3 ED.2.0 CLAUSE 19	Passed	0.35
OVERLOAD INDICATION - IEC 61672-3 ED.2.0 CLAUSE 20	Passed	0.25
HIGH LEVEL STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 21	Passed	0.10
LONG TERM STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 15	Passed	0.10
FILTER TEST 1/1OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
COMBINED ELECTRICAL AND ACOUSTICAL TEST - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	See test report

1 The results of this calibration apply only to the instrument type with serial number identified in this report.

2 Parameters are certified at actual environmental conditions.

3 The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organization responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2, to demonstrate that the model of sound level meter fully conforms to the requirements in the IEC 61672-2, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.
Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: PCB Piezotronics 377B20 s/n 112340 for acoustical test
Preamplifier: Larson Davis PRM831 s/n 015258 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: Larson Davis CAL200 s/n 2853
Windscreen: Larson Davis WS001 (3.5 in)

Measured Data: in Test Report # 40878 of 9 +1 pages.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.40879

Instrument: **Microphone**
Model: **377B20**
Manufacturer: **PCB Piezotronics**
Serial number: **112340**
Composed of:

Date Calibrated: **6/14/2018** *Cal Due:* **6/14/2019**

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes _X_ No

Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100/**
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Measurement Microphones, Scantek, Inc., Rev. 2/25/2015

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1017 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018
1203-Norsonic	Preamplifier	14059	Feb 12, 2018	Scantek, Inc./ NVLAP	Feb 12, 2019
4180-Brüel&Kjær	Microphone	2246115	Oct 24, 2017	DANAK / DPLA	Oct 24, 2019

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E Marshall
Date	6/14/2018	Date	6/18/2018

Document stored as: Z:\Calibration Lab\Mic 2018\PCB377B20_112340_M1.doc

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS[1] FROM PROCEDURES		MET[2,3]	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

[1] The results of this calibration apply only to the instrument type with serial number identified in this report.

[2] Results are normalized to the reference conditions.

[3] The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
21.8 ± 1.2	99.86 ± 0.020	59.5 ± 3.0

Main measured parameters:

Tone frequency (Hz)	Measured[4] /Acceptable Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-26.30 ± 0.12/ -26.0 ±1.5	48.43

[4] The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 40879 of one page.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.41006

Instrument: **Microphone**
Model: **377B20**
Manufacturer: **PCB Piezotronics**
Serial number: **112256**
Composed of:

Date Calibrated: **7/5/2018** *Cal Due:* **7/5/2019**

Status:	**Received**	**Sent**
In tolerance:	**X**	**X**
Out of tolerance:		
See comments:		

Contains non-accredited tests: ___**Yes** _**X**_ **No**

Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100/**
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Measurement Microphones, Scantek, Inc., Rev. 2/25/2015

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1017 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018
1203-Norsonic	Preamplifier	14059	Feb 12, 2018	Scantek, Inc./ NVLAP	Feb 12, 2019
4180-Brüel&Kjær	Microphone	2246115	Oct 24, 2017	DANAK / DPLA	Oct 24, 2019

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E. Marshall
Date	7/5/2018	Date	7/6/2018

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS[1] FROM PROCEDURES		MET[2,3]	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

[1] The results of this calibration apply only to the instrument type with serial number identified in this report.

[2] Results are normalized to the reference conditions.

[3] The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
21.5 ± 1.1	100.95 ± 0.020	51.7 ± 2.1

Main measured parameters:

Tone frequency (Hz)	Measured[4] /Acceptable Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-25.46 ± 0.12/ -26.0 ±1.5	53.36

[4] The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 41006 of one page.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.41005

Instrument: **Sound Level Meter**
Model: **831**
Manufacturer: **Larson Davis**
Serial number: **0002155**
Tested with: **Microphone 377B20 s/n 112256**
Preamplifier PRM831 s/n 016478
Type (class): **1**
Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100 /**

Date Calibrated: **7/6/2018** *Cal Due:* **7/6/2019**

Status:	**Received**	**Sent**
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes _X_ No
Calibration service: ___ Basic _X_ Standard
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
21.3	100.43	57.1

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E. Marshall
Date	7/6/2018	Date	7/6/2018

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES [1] FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT[2,3]	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - IEC61672-3 ED.2 CLAUSE 10	Passed	0.15
SELF-GENERATED NOISE - IEC 61672-3 ED.2 CLAUSE 11	Passed	0.30
FREQUENCY WEIGHTINGS: A NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: C NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: Z NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY AND TIME WEIGHTINGS AT 1 KHZ IEC 61672-3 ED.2.0 CLAUSE 14	Passed	0.20
LEVEL LINEARITY ON THE REFERENCE LEVEL RANGE - IEC 61672-3 ED.2 CLAUSE 16	Passed	0.25
LEVEL LINEARITY INCLUDING THE LEVEL RANGE CONTROL - IEC 61672-3 ED.2.0 CLAUSE 17	Passed	0.25
TONEBURST RESPONSE - IEC 61672-3 ED.2.0 CLAUSE 18	Passed	0.30
PEAK C SOUND LEVEL - IEC 61672-3 ED.2.0 CLAUSE 19	Passed	0.35
OVERLOAD INDICATION - IEC 61672-3 ED.2.0 CLAUSE 20	Passed	0.25
HIGH LEVEL STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 21	Passed	0.10
LONG TERM STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 15	Passed	0.10
FILTER TEST 1/1OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25

1 The results of this calibration apply only to the instrument type with serial number identified in this report.

2 Parameters are certified at actual environmental conditions.

3 The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organization responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2, to demonstrate that the model of sound level meter fully conforms to the requirements in the IEC 61672-2, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.
Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: PCB Piezotronics 377B20 s/n 112256 for acoustical test
Preamplifier: Larson Davis PRM831 s/n 016478 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: Larson Davis CAL200 s/n 7146
Windscreen: none

Measured Data: in Test Report # 41005 of 9 + 1 pages.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Certificate of Calibration and Conformance

This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	72.1	°F
Model Number:	831		22.28	°C
Serial Number:	3307	Rel. Humidity:	41.8	%
Customer:	TMS Rental	Pressure:	1000.2	mbars
Description:	Sound Level Meter		1000.2	hPa
Note:	As Found/As Left: In Tolerance			

Upon receipt for testing, this instrument was found to be:

Within the stated tolerance of the manufacturer's specification.

Calibration Date: 2/16/2018 Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due
Stanford Research Systems	DS360	123270	4/25/2018

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of The Modal Shop.

Technician: Adam Magee Signature:

THE MODAL SHOP
A PCB GROUP CO.

3149 East Kemper Road
Cincinnati, OH. 45241
Phone: (513) 351-9919
(800) 860-4867
www.modalshop.com

Certificate of Calibration and Conformance

This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	71.3	°F
Model Number:	831		21.83	°C
Serial Number:	3329	Rel. Humidity:	22.8	%
Customer:	TMS Rental	Pressure:	1003.1	mbars
Description:	Sound Level Meter		1003.6	hPa
Note:	As Found/As Left: In Tolerance			

Upon receipt for testing, this instrument was found to be:

Within the stated tolerance of the manufacturer's specification.

Calibration Date: 3/26/2018 Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due
Stanford Research Systems	DS360	123270	4/25/2018

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

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Technician: Adam Magee Signature:

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This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	75.2	°F
Model Number:	831		24.00	°C
Serial Number:	3330	Rel. Humidity:	20.9	%
Customer:	TMS Rental	Pressure:	1001.2	mbars
Description:	Sound Level Meter		1001.2	hPa
Note:	As Found/As Left: In Tolerance			

Upon receipt for testing, this instrument was found to be:

Within the stated tolerance of the manufacturer's specification.

Calibration Date: 2/5/2018 Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due
Stanford Research Systems	DS360	123270	4/25/2018

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of The Modal Shop.

Technician: Adam Magee Signature:

3149 East Kemper Road
Cincinnati, OH. 45241
Phone: (513) 351-9919
(800) 860-4867
www.modalshop.com

Certificate of Calibration and Conformance

This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	74.2	°F
Model Number:	831		23.44	°C
Serial Number:	3386	Rel. Humidity:	45.4	%
Customer:	TMS Rental	Pressure:	995.4	mbars
Description:	Sound Level Meter		995.4	hPa

Note: As Found / As Left: In Tolerance

Upon receipt for testing, this instrument was found to be:

Within the Stated tolerance of the manufacturer's specification

Calibration Date: 17-Jan-17 Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due
Stanford Research Systems	DS360	123270	4/19/2017
Larson Davis	2239	109	4/22/2017

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of The Modal Shop.

Technician: Andy McGuire Signature:

THE MODAL SHOP
A PCB GROUP CO.

3149 East Kemper Road Cincinnati, OH. 45241
Phone: (513) 351-9919
(800) 860-4867 www.modalshop.com

Certificate of Calibration and Conformance

This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	74.3	°F
Model Number:	831		23.50	°C
Serial Number:	3431	Rel. Humidity:	36.1	%
Customer:	TMS Rental	Pressure:	993.1	mbars
Description:	Sound Level Meter		993.1	hPa
Note:	As Found/As Left: In Tolerance			

Upon receipt for testing, this instrument was found to be:

Within the stated tolerance of the manufacturer's specification.

Calibration Date: 2/28/2018 Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due
Stanford Research Systems	DS360	123270	4/25/2018

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of The Modal Shop.

Technician: Adam Magee Signature:

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A PCB GROUP CO.

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Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.39499

Instrument: **Sound Level Meter**
Model: **831**
Manufacturer: **Larson Davis**
Serial number: **0003753**
Tested with: **Microphone 377B20 s/n 142956**
Preamplifier PRM831 s/n 029564
Type (class): **1**
Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100 /**

Date Calibrated: **10/23/2017** *Cal Due:* **10/23/2018**

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes X No
Calibration service: __ Basic X Standard
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 26, 2016	Scantek, Inc./ NVLAP	Oct 26, 2017
DS-360-SRS	Function Generator	61646	Sep 20, 2017	ACR Env. / A2LA	Sep 20, 2018
34401A-Agilent Technologies	Digital Voltmeter	MY41022043	Sep 9, 2017	ACR Env. / A2LA	Sep 9, 2018
HM30-Thommen	Meteo Station	1040170/39633	Nov 1, 2016	ACR Env./ A2LA	Nov 1, 2017
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2016	Scantek, Inc./ NVLAP	Nov 10, 2017

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
21.5	101.88	54.0

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	William D. Gallagher
Signature	Lydon Dawkins	Signature	William D Gallagher
Date	10/23/2017	Date	10/24/2017

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES[1] FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT[2,3]	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - IEC61672-3 ED.2 CLAUSE 10	Passed	0.15
SELF-GENERATED NOISE - IEC 61672-3 ED.2 CLAUSE 11	Passed	0.30
FREQUENCY WEIGHTINGS: A NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: C NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: Z NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY AND TIME WEIGHTINGS AT 1 KHZ IEC 61672-3 ED.2.0 CLAUSE 14	Passed	0.20
LEVEL LINEARITY ON THE REFERENCE LEVEL RANGE - IEC 61672-3 ED.2 CLAUSE 16	Passed	0.25
LEVEL LINEARITY INCLUDING THE LEVEL RANGE CONTROL - IEC 61672-3 ED.2.0 CLAUSE 17	Passed	0.25
TONEBURST RESPONSE - IEC 61672-3 ED.2.0 CLAUSE 18	Passed	0.30
PEAK C SOUND LEVEL - IEC 61672-3 ED.2.0 CLAUSE 19	Passed	0.35
OVERLOAD INDICATION - IEC 61672-3 ED.2.0 CLAUSE 20	Passed	0.25
HIGH LEVEL STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 21	Passed	0.10
LONG TERM STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 15	Passed	0.10
FILTER TEST 1/1OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
COMBINED ELECTRICAL AND ACOUSTICAL TEST - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	See test report

1 The results of this calibration apply only to the instrument type with serial number identified in this report.

2 Parameters are certified at actual environmental conditions.

3 The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organization responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2, to demonstrate that the model of sound level meter fully conforms to the requirements in the IEC 61672-2, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.
Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: PCB Piezotronics 377B20 s/n 142956 for acoustical test
Preamplifier: Larson Davis PRM831 s/n 029564 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: Larson Davis CAL200 s/n 7147
Windscreen: none

Measured Data: in Test Report # 39499 of 9 +1 pages.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.39500

Instrument: **Microphone**
Model: **377B20**
Manufacturer: **PCB Piezotronics**
Serial number: **142956**
Composed of:

Date Calibrated: **10/20/2017** *Cal Due:* **10/20/2018**

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes _X_ No

Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100/**
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Measurement Microphones, Scantek, Inc., Rev. 2/25/2015

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 26, 2016	Scantek, Inc./ NVLAP	Oct 26, 2017
DS-360-SRS	Function Generator	33584	Oct 20, 2015	ACR Env./ A2LA	Oct 20, 2017
34401A-Agilent Technologies	Digital Voltmeter	MY41022043	Sep 9, 2017	ACR Env. / A2LA	Sep 9, 2018
HM30-Thommen	Meteo Station	1040170/39633	Nov 1, 2016	ACR Env./ A2LA	Nov 1, 2017
PC Program 1017 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 10, 2016	Scantek, Inc./ NVLAP	Nov 10, 2017
1203-Norsonic	Preamplifier	14059	Feb 13, 2017	Scantek, Inc./ NVLAP	Feb 13, 2018
4180-Brüel&Kjær	Microphone	2246115	Oct 26, 2015	NPL-UK / UKAS	Oct 26, 2017

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	Authorized signatory:	William D. Gallagher
Signature	Lydon Dawkins	Signature	William D Gallagher
Date	10/20/2017	Date	10/24/2017

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS[1] FROM PROCEDURES		MET[2,3]	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

[1] The results of this calibration apply only to the instrument type with serial number identified in this report.

[2] Results are normalized to the reference conditions.

[3] The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments:	The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
22.3 ± 1.0	100.84 ± 0.020	45.0 ± 2.1

Main measured parameters:

Tone frequency (Hz)	Measured[4] /Acceptable Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-26.91 ± 0.12/ -26.0 ±1.5	45.12

[4] The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 39500 of one page.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.40029

Instrument: **Sound Level Meter**
Model: **831**
Manufacturer: **Larson Davis**
Serial number: **0004375**
Tested with: **Microphone 377C20 s/n 165757**
Preamplifier PRM831 s/n 046516
Type (class): **1**
Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100 /**

Date Calibrated: **1/31/2018** *Cal Due:* **1/31/2019**

Status:	**Received**	**Sent**
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes _X_ No
Calibration service: __ Basic _X_ Standard
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.3	101.03	31.7

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E. Marshall
Date	1/31/2018	Date	2/1/2018

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES[1] FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT[2,3]	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - IEC61672-3 ED.2 CLAUSE 10	Passed	0.15
SELF-GENERATED NOISE - IEC 61672-3 ED.2 CLAUSE 11	Passed	0.30
FREQUENCY WEIGHTINGS: A NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: C NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: Z NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY AND TIME WEIGHTINGS AT 1 KHZ IEC 61672-3 ED.2.0 CLAUSE 14	Passed	0.20
LEVEL LINEARITY ON THE REFERENCE LEVEL RANGE - IEC 61672-3 ED.2 CLAUSE 16	Passed	0.25
LEVEL LINEARITY INCLUDING THE LEVEL RANGE CONTROL - IEC 61672-3 ED.2.0 CLAUSE 17	Passed	0.25
TONEBURST RESPONSE - IEC 61672-3 ED.2.0 CLAUSE 18	Passed	0.30
PEAK C SOUND LEVEL - IEC 61672-3 ED.2.0 CLAUSE 19	Passed	0.35
OVERLOAD INDICATION - IEC 61672-3 ED.2.0 CLAUSE 20	Passed	0.25
HIGH LEVEL STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 21	Passed	0.10
LONG TERM STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 15	Passed	0.10
FILTER TEST 1/1OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
COMBINED ELECTRICAL AND ACOUSTICAL TEST - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	See test report

1 The results of this calibration apply only to the instrument type with serial number identified in this report.

2 Parameters are certified at actual environmental conditions.

3 The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organization responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2, to demonstrate that the model of sound level meter fully conforms to the requirements in the IEC 61672-2, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.
Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: PCB Piezotronics 377C20 s/n 165757 for acoustical test
Preamplifier: Larson Davis PRM831 s/n 046516 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: none
Windscreen: none

Measured Data: in Test Report # 40029 of 9 + 1 pages.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.40030

Instrument:	**Microphone**
Model:	**377C20**
Manufacturer:	**PCB Piezotronics**
Serial number:	**165757**
Composed of:	

Date Calibrated: **1/29/2018** *Cal Due:* **1/29/2019**

Status:	**Received**	**Sent**
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes _X_ No

Customer:	**Epsilon Associates, Inc.**
Tel/Fax:	**978-897-7100/**
Address:	**3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Measurement Microphones, Scantek, Inc., Rev. 2/25/2015

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1017 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018
1203-Norsonic	Preamplifier	14059	Feb 13, 2017	Scantek, Inc./ NVLAP	Feb 13, 2018
4180-Brüel&Kjær	Microphone	2246115	Oct 24, 2017	DANAK / DPLA	Oct 24, 2019

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E Marshall
Date	1/29/2018	Date	2/1/2018

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS[1] FROM PROCEDURES		MET[2,3]	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

[1] The results of this calibration apply only to the instrument type with serial number identified in this report.

[2] Results are normalized to the reference conditions.

[3] The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments:	The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.8 ± 1.0	100.14 ± 0.025	40.1 ± 2.1

Main measured parameters:

Tone frequency (Hz)	Measured[4]/Acceptable Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-26.31 ± 0.12/ -26.0 ±1.5	48.34

[4] The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 40030 of one page.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

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A PCB GROUP CO.

3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

~Calibration Certificate~

Manufacturer:	Larson Davis	Asset ID:	
Model:	CAL200	Calibration Date:	Jun 19, 2017 11:36:07
Serial Number:	12375	Due Date:	
Description:	Acoustic Calibrator	Technician:	Ed Devlin
Customer:	TMS Rental	Approval:	

Calibration Results:

Measured SPL : 94.17 dB re. 20µPa

Measured Frequency : 1,000.00 Hz

Temperature: 22 °C (72 °F)

Humidity: 47.90%

Pressure: 990.8 mbar

Upon receipt for calibration, the instrument was found to be:
WITHIN the stated tolerance of the manufacturer's specification.

Note: **As Found / As Left: In Tolerane.**

Measurement uncertainty at 95% confidence level: 0.25 dB

The subject instrument was calibrated to the indicated specification using standards stated below or to accepted values of natural physical constants. This document certifies that the instrument met the following specification

This calibration is traceable through : 683/284413-14

Notes:
The calibration was performed under operating procedures intended to implement the requirements of ISO 9001, ISO 17025 and ANSI Z540. Unless otherwise noted, the reported value is both "as found" and "as left" data. Calibration results relate only to the items calibrated. This certificate may not be reproduced, except in full, without written permission.

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	9/20/2016	9/20/2017

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~Calibration Certificate~

Manufacturer:	Larson Davis	Asset ID:	
Model:	CAL200	Calibration Date:	Jun 19, 2017 11:38:36
Serial Number:	12375	Due Date:	
Description:	Acoustic Calibrator	Technician:	Ed Devlin
Customer:	TMS Rental	Approval:	

Calibration Results:

Measured SPL : 114.18 dB re. 20µPa

Measured Frequency : 1,000.00 Hz

Temperature:	22 °C (72 °F)
Humidity:	47.90%
Pressure:	990.8 mbar

Upon receipt for calibration, the instrument was found to be:
WITHIN the stated tolerance of the manufacturer's specification.

Note: **As Found / As Left: In Tolerane.**

Measurement uncertainty at 95% confidence level: 0.25 dB

The subject instrument was calibrated to the indicated specification using standards stated below or to accepted values of natural physical constants. This document certifies that the instrument met the following specification

This calibration is traceable through : 683/284413-14

Notes:
The calibration was performed under operating procedures intended to implement the requirements of ISO 9001, ISO 17025 and ANSI Z540. Unless otherwise noted, the reported value is both "as found" and "as left" data. Calibration results relate only to the items calibrated. This certificate may not be reproduced, except in full, without written permission.

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	9/20/2016	9/20/2017

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www.modalshop.com

~Certificate of Calibration~

Manufacturer: PCB
Model Number: 377B02
Serial Number: 155319
Asset ID: 63510
Description: Free-Field Microphone

Customer: TMS Rental
Address:

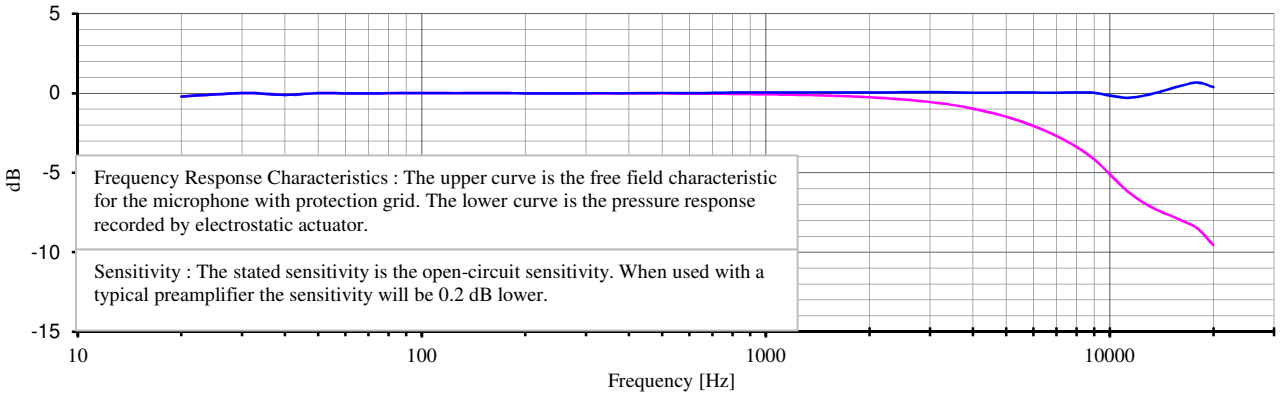
Calibration Date: Feb 23, 2018 14:03:34
Due Date:

Sensitivity:	**250 Hz**	**1 kHz**	
	-26.41	-26.48	dB re. 1V/Pa
	47.82	47.44	mV/Pa

Temperature:	71 (22)	°F (°C)
Humidity:	42	%
Ambient Pressure:	1008.4	mbar

Cal. Results: In Tolerance

Polarization Voltage: 0 VDC



Traceability: The calibration is traceable through A1633.

Notes:
Calibration results relate only to the items calibrated.
This certificate may not be reproduced, except in full, without written permission.
This calibration is performed in compliance with ISO 9001, ISO 17025 and ANSI Z540.
Measurement uncertainty (250 Hz sensitivity calibration) at 95% confidence level: 0.30 dB
Calibrated per procedure PRD-P204.

User Note: As Found / As Left: In Tolerance

Frequency Response with reference to level at 250 Hz

Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)
20	-0.21	**630**	0.02	**4500**	0.03		
25	-0.06	**800**	0.05	**5000**	0.05		
31.5	0.01	**1000**	0.05	**5600**	0.05		
40	-0.10	**1120**	0.06	**6300**	0.05		
50	0.01	**1250**	0.06	**7100**	0.04		
63	0.00	**1400**	0.07	**8000**	0.06		
80	0.01	**1600**	0.05	**9000**	0.03		
100	0.01	**1800**	0.06	**10000**	-0.15		
125	0.01	**2000**	0.06	**11200**	-0.28		
160	0.01	**2240**	0.06	**12500**	-0.16		
200	0.00	**2500**	0.07	**14000**	0.10		
250	0.00	**2800**	0.07	**16000**	0.45		
315	0.01	**3150**	0.07	**18000**	0.68		
400	0.00	**3550**	0.06	**20000**	0.39		
500	0.03	**4000**	0.04				

Technician: Bradly Haarmeyer

Approval: Bradly Haarmeyer

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	2/22/2018	2/22/2019

ACCREDITED
Calibration Lab
CALIBRATION CERT 2649.01

~ *Certificate of Calibration and Compliance* ~

Microphone Model: 377B02 Serial Number: 302605 Manufacturer: PCB

Calibration Environmental Conditions

Environmental test conditions as printed on microphone calibration chart.

Reference Equipment

Manufacturer	Model #	Serial #	PCB Control #	Cal Date	Due Date
National Instruments	PCIe-6351	1896F08	CA1918	10/20/17	10/19/18
Larson Davis	PRM915	146	CA2115	2/15/17	2/15/18
Larson Davis	PRM902	4943	CA1162	11/13/17	11/13/18
Larson Davis	PRM916	104	LD015	2/15/17	2/15/18
Larson Davis	CAL250	5109	CA1496	10/19/17	10/19/18
Larson Davis	2201	140	CA890	5/3/17	5/3/18
Bruel & Kjaer	4192	2954556	CA2323	9/15/17	9/14/18
Larson Davis	GPRM902	3999	CA1090	9/20/17	9/20/18
Newport	iTHX-SD/N	1080002	CA1511	2/14/17	2/14/18
Larson Davis	PRA951-4	241	CA1449	10/26/17	10/26/18
Larson Davis	PRM915	147	CA2179	6/6/17	6/6/18
PCB	68510-02	N/A	CA2672	12/27/17	12/27/18
0	0	0	0	not required	not required
0	0	0	0	not required	not required
0	0	0	0	not required	not required

Frequency sweep performed with B&K UA0033 electrostatic actuator.

Condition of Unit

As Found: n/a

As Left: New Unit, In Tolerance

Notes

1. Calibration of reference equipment is traceable to one or more of the following National Labs; NIST, PTB or DFM.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI/NCSL Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Open Circuit Sensitivity is measured using the insertion voltage method following procedure AT603-5.
6. Measurement uncertainty (95% confidence level with coverage factor of 2) for sensitivity is +/-0.20 dB.
7. Unit calibrated per ACS-20.

Technician: Leonard Lukasik Date: January 17, 2018

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3425 Walden Avenue, Depew, New York, 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

~ Calibration Report ~

Microphone Model: 377B02 Serial Number: 302605 Description: 1/2" Free-Field Microphone

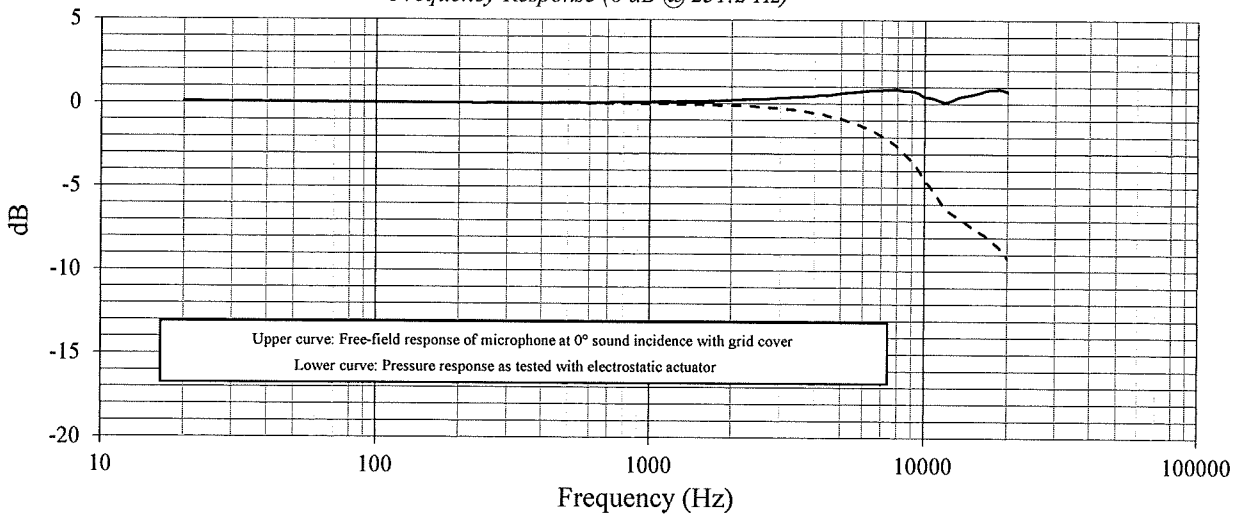
Calibration Data

Open Circuit Sensitivity @ 251.2 Hz: 44.66 mV/Pa
-27 dB re 1V/Pa

Polarization Voltage, External: 0 V
Capacitance: 12.5 pF

Temperature: 70 °F (21°C) Ambient Pressure: 1003 mbar Relative Humidity: 26 %

Frequency Response (0 dB @ 251.2 Hz)



Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)
20.0	0.08	0.08	1679	-0.09	0.14	7499	-2.24	0.83	-	-	-
25.1	0.05	0.05	1778	-0.11	0.14	7943	-2.53	0.86	-	-	-
31.6	0.05	0.05	1884	-0.12	0.17	8414	-2.95	0.78	-	-	-
39.8	0.05	0.05	1995	-0.12	0.19	8913	-3.35	0.76	-	-	-
50.1	0.04	0.04	2114	-0.13	0.22	9441	-3.86	0.66	-	-	-
63.1	0.03	0.03	2239	-0.14	0.23	10000	-4.53	0.42	-	-	-
79.4	0.03	0.03	2371	-0.16	0.25	10593	-5.04	0.36	-	-	-
100.0	0.02	0.02	2512	-0.21	0.25	11220	-5.64	0.22	-	-	-
125.9	0.01	0.01	2661	-0.24	0.27	11885	-6.22	0.10	-	-	-
158.5	0.01	0.01	2818	-0.26	0.30	12589	-6.56	0.21	-	-	-
199.5	0.01	0.01	2985	-0.29	0.34	13335	-6.79	0.40	-	-	-
251.2	0.00	0.00	3162	-0.34	0.34	14125	-7.11	0.48	-	-	-
316.2	0.00	0.01	3350	-0.37	0.37	14962	-7.40	0.57	-	-	-
398.1	0.00	0.00	3548	-0.43	0.39	15849	-7.67	0.68	-	-	-
501.2	-0.01	0.03	3758	-0.49	0.41	16788	-7.91	0.81	-	-	-
631.0	-0.02	0.02	3981	-0.56	0.44	17783	-8.28	0.83	-	-	-
794.3	-0.03	0.06	4217	-0.60	0.51	18837	-8.65	0.86	-	-	-
1000.0	-0.05	0.08	4467	-0.73	0.50	19953	-9.20	0.73	-	-	-
1059.3	-0.04	0.09	4732	-0.82	0.55	-	-	-	-	-	-
1122.0	-0.04	0.10	5012	-0.91	0.62	-	-	-	-	-	-
1188.5	-0.05	0.10	5309	-1.05	0.66	-	-	-	-	-	-
1258.9	-0.07	0.09	5623	-1.19	0.69	-	-	-	-	-	-
1333.5	-0.06	0.12	5957	-1.34	0.74	-	-	-	-	-	-
1412.5	-0.07	0.13	6310	-1.52	0.78	-	-	-	-	-	-
1496.2	-0.09	0.11	6683	-1.72	0.80	-	-	-	-	-	-
1584.9	-0.09	0.12	7080	-1.96	0.82	-	-	-	-	-	-

Technician: Leonard Lukasik Date: January 17, 2018

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CALIBRATION CERT #1662.01

PCB PIEZOTRONICS VIBRATION DIVISION
3425 Walden Avenue, Depew, New York, 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID:CAL112-3599032378.833+0

~ *Certificate of Calibration and Compliance* ~

Microphone Model: 377B02 Serial Number: 302650 Manufacturer: PCB

Calibration Environmental Conditions

Environmental test conditions as printed on microphone calibration chart.

Reference Equipment

Manufacturer	Model #	Serial #	PCB Control #	Cal Date	Due Date
National Instruments	PCIe-6351	1896F08	CA1918	10/20/17	10/19/18
Larson Davis	PRM915	146	CA2115	2/15/17	2/15/18
Larson Davis	PRM902	4943	CA1162	11/13/17	11/13/18
Larson Davis	PRM916	104	LD015	2/15/17	2/15/18
Larson Davis	CAL250	5109	CA1496	10/19/17	10/19/18
Larson Davis	2201	140	CA890	5/3/17	5/3/18
Bruel & Kjaer	4192	2954556	CA2323	9/15/17	9/14/18
Larson Davis	GPRM902	3999	CA1090	9/20/17	9/20/18
Newport	iTHX-SD/N	1080002	CA1511	2/14/17	2/14/18
Larson Davis	PRA951-4	241	CA1449	10/26/17	10/26/18
Larson Davis	PRM915	147	CA2179	6/6/17	6/6/18
PCB	68510-02	N/A	CA2672	12/27/17	12/27/18
0	0	0	0	not required	not required
0	0	0	0	not required	not required
0	0	0	0	not required	not required

Frequency sweep performed with B&K UA0033 electrostatic actuator.

Condition of Unit

As Found: n/a

As Left: New Unit, In Tolerance

Notes

1. Calibration of reference equipment is traceable to one or more of the following National Labs; NIST, PTB or DFM.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI/NCSL Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Open Circuit Sensitivity is measured using the insertion voltage method following procedure AT603-5.
6. Measurement uncertainty (95% confidence level with coverage factor of 2) for sensitivity is +/-0.20 dB.
7. Unit calibrated per ACS-20.

Technician: Leonard Lukasik Date: January 17, 2018

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ID:CAL112-359903582S.910+0

~ *Calibration Report* ~

Microphone Model: 377B02 Serial Number: 302650 Description: 1/2" Free-Field Microphone

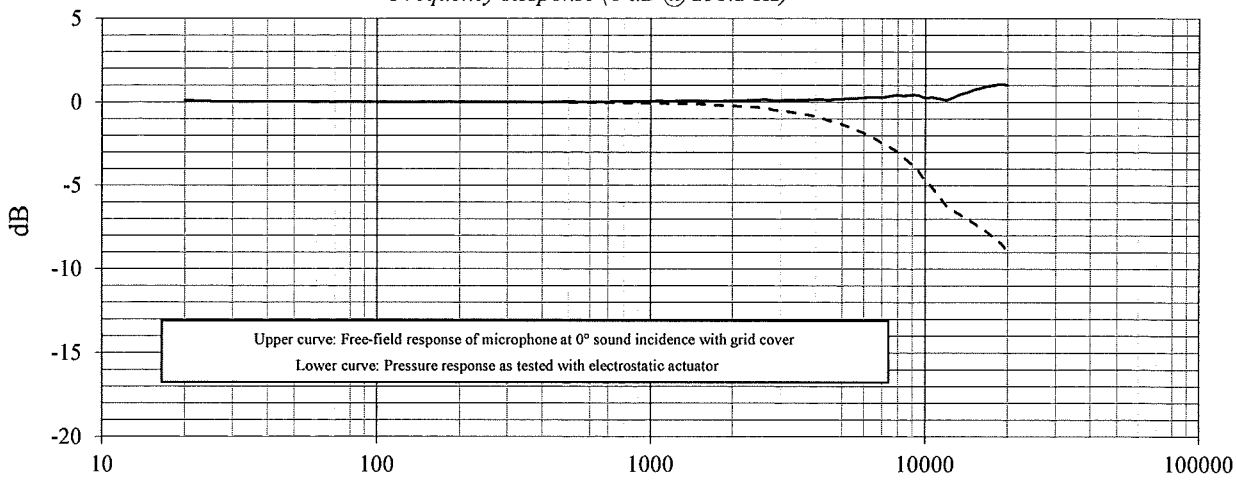
Calibration Data

Open Circuit Sensitivity @ 251.2 Hz: 46.29 mV/Pa
-26.69 dB re 1V/Pa

Polarization Voltage, External: 0 V
Capacitance: 13.5 pF

Temperature: 70 °F (21°C) Ambient Pressure: 1003 mbar Relative Humidity: 24 %

Frequency Response (0 dB @ 251.2 Hz)



Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)
20.0	0.10	0.10	1679	-0.18	0.05	7499	-2.71	0.36	-	-	-
25.1	0.04	0.04	1778	-0.20	0.05	7943	-2.97	0.42	-	-	-
31.6	0.02	0.02	1884	-0.22	0.06	8414	-3.35	0.38	-	-	-
39.8	0.02	0.02	1995	-0.22	0.09	8913	-3.69	0.42	-	-	-
50.1	0.03	0.03	2114	-0.26	0.08	9441	-4.11	0.41	-	-	-
63.1	0.02	0.02	2239	-0.27	0.10	10000	-4.69	0.26	-	-	-
79.4	0.02	0.02	2371	-0.30	0.11	10593	-5.12	0.28	-	-	-
100.0	0.01	0.01	2512	-0.33	0.13	11220	-5.65	0.21	-	-	-
125.9	0.01	0.01	2661	-0.37	0.14	11885	-6.18	0.14	-	-	-
158.5	0.01	0.01	2818	-0.47	0.09	12589	-6.50	0.27	-	-	-
199.5	0.00	0.00	2985	-0.52	0.10	13335	-6.73	0.46	-	-	-
251.2	0.00	0.00	3162	-0.56	0.12	14125	-7.02	0.57	-	-	-
316.2	-0.01	0.00	3350	-0.63	0.12	14962	-7.24	0.73	-	-	-
398.1	-0.01	-0.01	3548	-0.70	0.12	15849	-7.52	0.83	-	-	-
501.2	-0.02	0.02	3758	-0.76	0.14	16788	-7.78	0.94	-	-	-
631.0	-0.04	0.01	3981	-0.85	0.15	17783	-8.11	1.00	-	-	-
794.3	-0.06	0.03	4217	-0.96	0.16	18837	-8.44	1.07	-	-	-
1000.0	-0.07	0.05	4467	-1.10	0.13	19953	-8.91	1.02	-	-	-
1059.3	-0.06	0.07	4732	-1.21	0.16	-	-	-	-	-	-
1122.0	-0.08	0.06	5012	-1.35	0.18	-	-	-	-	-	-
1188.5	-0.10	0.05	5309	-1.49	0.21	-	-	-	-	-	-
1258.9	-0.09	0.07	5623	-1.66	0.22	-	-	-	-	-	-
1333.5	-0.10	0.08	5957	-1.82	0.26	-	-	-	-	-	-
1412.5	-0.11	0.08	6310	-2.01	0.28	-	-	-	-	-	-
1496.2	-0.13	0.07	6683	-2.24	0.28	-	-	-	-	-	-
1584.9	-0.14	0.07	7080	-2.49	0.30	-	-	-	-	-	-

Technician: Leonard Lukasik Date: January 17, 2018

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ID:CAL112-3599035825.910+0

~ *Certificate of Calibration and Compliance* ~

Microphone Model: 377B02 Serial Number: 304093 Manufacturer: PCB

Calibration Environmental Conditions

Environmental test conditions as printed on microphone calibration chart.

Reference Equipment

Manufacturer	Model #	Serial #	PCB Control #	Cal Date	Due Date
National Instruments	PCIe-6351	1896F08	CA1918	10/20/17	10/19/18
Larson Davis	PRM915	146	CA2115	2/15/17	2/15/18
Larson Davis	PRM902	4943	CA1162	11/13/17	11/13/18
Larson Davis	PRM916	104	LD015	2/15/17	2/15/18
Larson Davis	CAL250	5109	CA1496	10/19/17	10/19/18
Larson Davis	2201	140	CA890	5/3/17	5/3/18
Bruel & Kjaer	4192	2954556	CA2323	9/15/17	9/14/18
Larson Davis	GPRM902	3999	CA1090	9/20/17	9/20/18
Newport	iTHX-SD/N	1080002	CA1511	2/14/17	2/14/18
Larson Davis	PRA951-4	241	CA1449	10/26/17	10/26/18
Larson Davis	PRM915	147	CA2179	6/6/17	6/6/18
PCB	68510-02	N/A	CA2672	12/27/17	12/27/18
0	0	0	0	not required	not required
0	0	0	0	not required	not required
0	0	0	0	not required	not required

Frequency sweep performed with B&K UA0033 electrostatic actuator.

Condition of Unit

As Found: n/a

As Left: New Unit, In Tolerance

Notes

1. Calibration of reference equipment is traceable to one or more of the following National Labs; NIST, PTB or DFM.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI/NCSL Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Open Circuit Sensitivity is measured using the insertion voltage method following procedure AT603-5.
6. Measurement uncertainty (95% confidence level with coverage factor of 2) for sensitivity is +/-0.20 dB.
7. Unit calibrated per ACS-20.

Technician: Leonard Lukasik *lL* Date: January 30, 2018

ilac-MRA ACCREDITED

CALIBRATION CERT #1662.01

PCB PIEZOTRONICS INC.
VIBRATION DIVISION
3425 Walden Avenue, Depew, New York, 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID:CAL112-3600163171.005+0

~ Calibration Report ~

Microphone Model: 377B02 Serial Number: 304093 Description: 1/2" Free-Field Microphone

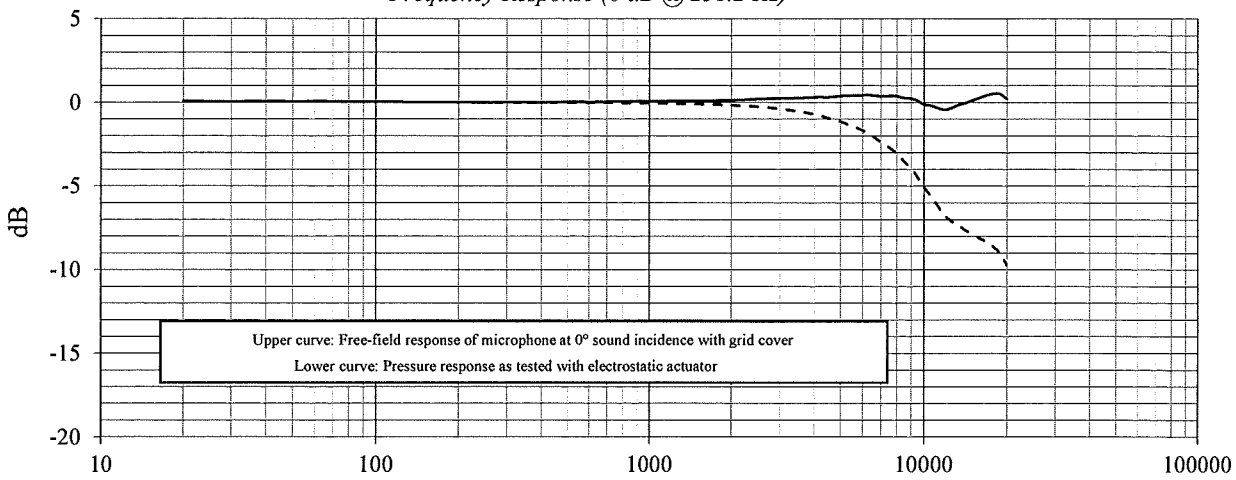
Calibration Data

Open Circuit Sensitivity @ 251.2 Hz: 51.90 mV/Pa
-25.7 dB re 1V/Pa

Polarization Voltage, External: 0 V
Capacitance: 12.8 pF

Temperature: 67 °F (19°C) Ambient Pressure: 996 mbar Relative Humidity: 24 %

Frequency Response (0 dB @ 251.2 Hz)



Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)
20.0	0.09	0.09	1679	-0.14	0.09	7499	-2.69	0.38	-	-	-
25.1	0.05	0.05	1778	-0.14	0.11	7943	-3.01	0.38	-	-	-
31.6	0.05	0.05	1884	-0.16	0.12	8414	-3.46	0.27	-	-	-
39.8	0.07	0.07	1995	-0.18	0.13	8913	-3.87	0.24	-	-	-
50.1	0.05	0.05	2114	-0.20	0.14	9441	-4.40	0.12	-	-	-
63.1	0.06	0.06	2239	-0.22	0.15	10000	-5.08	-0.13	-	-	-
79.4	0.03	0.03	2371	-0.24	0.17	10593	-5.60	-0.20	-	-	-
100.0	0.03	0.03	2512	-0.26	0.20	11220	-6.20	-0.34	-	-	-
125.9	0.02	0.02	2661	-0.30	0.21	11885	-6.76	-0.44	-	-	-
158.5	0.02	0.02	2818	-0.34	0.22	12589	-7.10	-0.33	-	-	-
199.5	0.01	0.01	2985	-0.37	0.25	13335	-7.35	-0.16	-	-	-
251.2	0.00	0.00	3162	-0.43	0.25	14125	-7.63	-0.04	-	-	-
316.2	0.00	0.01	3350	-0.49	0.25	14962	-7.85	0.12	-	-	-
398.1	-0.01	-0.01	3548	-0.56	0.26	15849	-8.09	0.26	-	-	-
501.2	-0.01	0.03	3758	-0.63	0.28	16788	-8.31	0.41	-	-	-
631.0	-0.02	0.02	3981	-0.70	0.30	17783	-8.60	0.51	-	-	-
794.3	-0.04	0.05	4217	-0.80	0.31	18837	-9.00	0.51	-	-	-
1000.0	-0.05	0.07	4467	-0.93	0.30	19953	-9.71	0.22	-	-	-
1059.3	-0.06	0.07	4732	-1.04	0.34	-	-	-	-	-	-
1122.0	-0.07	0.07	5012	-1.15	0.38	-	-	-	-	-	-
1188.5	-0.07	0.08	5309	-1.31	0.39	-	-	-	-	-	-
1258.9	-0.08	0.08	5623	-1.48	0.41	-	-	-	-	-	-
1333.5	-0.09	0.09	5957	-1.65	0.42	-	-	-	-	-	-
1412.5	-0.10	0.09	6310	-1.85	0.44	-	-	-	-	-	-
1496.2	-0.11	0.09	6683	-2.13	0.39	-	-	-	-	-	-
1584.9	-0.12	0.09	7080	-2.41	0.37	-	-	-	-	-	-

Technician: Leonard Lukasik Date: January 30, 2018

ilac-MRA ACCREDITED
CALIBRATION CERT #1862.01

PCB PIEZOTRONICS
VIBRATION DIVISION
3425 Walden Avenue, Depew, New York, 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID:CAL112-3600163171.005+0

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.40499

Instrument: **Sound Level Meter**
Model: **140**
Manufacturer: **Norsonic**
Serial number: **1403178**
Tested with: **Microphone 40AN s/n 73449**
Preamplifier 1209 s/n 12492
Type (class): **1**
Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100 /**

Date Calibrated: **4/10/2018** *Cal Due:* **4/10/2019**

Status:	**Received**	**Sent**
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes X No
Calibration service: __ Basic X Standard
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
24.9	100.74	39.9

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E Marshall
Date	4/10/2018	Date	4/10/2018

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES[1] FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT[2,3]	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - IEC61672-3 ED.2 CLAUSE 10	Passed	0.15
SELF-GENERATED NOISE - IEC 61672-3 ED.2 CLAUSE 11	Passed	0.30
FREQUENCY WEIGHTINGS: A NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: C NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: Z NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY AND TIME WEIGHTINGS AT 1 KHZ IEC 61672-3 ED.2.0 CLAUSE 14	Passed	0.20
LEVEL LINEARITY ON THE REFERENCE LEVEL RANGE - IEC 61672-3 ED.2 CLAUSE 16	Passed	0.25
TONEBURST RESPONSE - IEC 61672-3 ED.2.0 CLAUSE 18	Passed	0.30
PEAK C SOUND LEVEL - IEC 61672-3 ED.2.0 CLAUSE 19	Passed	0.35
OVERLOAD INDICATION - IEC 61672-3 ED.2.0 CLAUSE 20	Passed	0.25
HIGH LEVEL STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 21	Passed	0.10
LONG TERM STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 15	Passed	0.10
FILTER TEST 1/1OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
COMBINED ELECTRICAL AND ACOUSTICAL TEST - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	See test report

1 The results of this calibration apply only to the instrument type with serial number identified in this report.

2 Parameters are certified at actual environmental conditions.

3 The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organization responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2, to demonstrate that the model of sound level meter fully conforms to the requirements in the IEC 61672-2, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.
Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: GRAS 40AN s/n 73449 for acoustical test
Preamplifier: Norsonic 1209 s/n 12492 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: none
Windscreen: Norsonic Nor1434 (ø 90mm)

Measured Data: in Test Report # 40499 of 9 + 1 pages.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
CALIBRATION
NVLAP Lab Code: 200625-0

Calibration Certificate No.40500

Instrument: **Microphone**
Model: **40AN**
Manufacturer: **GRAS**
Serial number: **73449**
Composed of:

Date Calibrated: **4/10/2018** *Cal Due:* **4/10/2019**

Status:	**Received**	**Sent**
In tolerance:	**X**	**X**
Out of tolerance:		
See comments:		

Contains non-accredited tests: **__Yes _X_ No**

Customer: **Epsilon Associates, Inc.**
Tel/Fax: **978-897-7100/**
Address: **3 Mill & Main Place, Suite 250, Maynard, MA 01754**

Tested in accordance with the following procedures and standards:
Calibration of Measurement Microphones, Scantek, Inc., Rev. 2/25/2015

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 30, 2017	Scantek, Inc./ NVLAP	Oct 30, 2018
DS-360-SRS	Function Generator	33584	Oct 24, 2017	ACR Env./ A2LA	Oct 24, 2019
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 25, 2017	ACR Env. / A2LA	Oct 25, 2018
HM30-Thommen	Meteo Station	1040170/39633	Oct 25, 2017	ACR Env./ A2LA	Oct 25, 2018
PC Program 1017 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 10, 2017	Scantek, Inc./ NVLAP	Nov 10, 2018
1203-Norsonic	Preamplifier	14059	Feb 12, 2018	Scantek, Inc./ NVLAP	Feb 12, 2019
4180-Brüel&Kjær	Microphone	2246115	Oct 24, 2017	DANAK / DPLA	Oct 24, 2019

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Steven E. Marshall
Signature	Lydon Dawkins	Signature	Steven E. Marshall
Date	4/10/2018	Date	4/10/2018

Document stored as: Z:\Calibration Lab\Mic 2018\GRAS40AN_73449_M1.doc

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS[1] FROM PROCEDURES		MET[2,3]	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

[1] The results of this calibration apply only to the instrument type with serial number identified in this report.

[2] Results are normalized to the reference conditions.

[3] The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments:	The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
24.0 ± 1.0	100.74 ± 0.020	36.7 ± 2.2

Main measured parameters:

Tone frequency (Hz)	Measured[4]/Nominal Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-25.29 ± 0.12/ -26.0	54.39

[4] The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 40500 of one page.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA
Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Appendix C

SUNY MesoNet Meteorological Data

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180806T000000	2018	08	06	00:00	66.4	99.8	0
20180806T000500	2018	08	06	00:05	65.9	99.8	0
20180806T001000	2018	08	06	00:10	65.4	99.7	0
20180806T001500	2018	08	06	00:15	65.5	99.7	0
20180806T002000	2018	08	06	00:20	65	99.7	0
20180806T002500	2018	08	06	00:25	64.6	99.6	0
20180806T003000	2018	08	06	00:30	64.6	99.7	0
20180806T003500	2018	08	06	00:35	64.5	99.7	0
20180806T004000	2018	08	06	00:40	64.5	99.8	0
20180806T004500	2018	08	06	00:45	64.9	99.8	0
20180806T005000	2018	08	06	00:50	64.3	99.8	0
20180806T005500	2018	08	06	00:55	63.9	99.7	0
20180806T010000	2018	08	06	01:00	64.2	99.8	0
20180806T010500	2018	08	06	01:05	64.6	99.9	0
20180806T011000	2018	08	06	01:10	64.4	99.8	0
20180806T011500	2018	08	06	01:15	64.2	99.8	0
20180806T012000	2018	08	06	01:20	64	99.8	0
20180806T012500	2018	08	06	01:25	64	99.9	0
20180806T013000	2018	08	06	01:30	63.3	99.8	0
20180806T013500	2018	08	06	01:35	63.2	99.8	0
20180806T014000	2018	08	06	01:40	63	99.8	0
20180806T014500	2018	08	06	01:45	63	99.9	0
20180806T015000	2018	08	06	01:50	63.6	100	0
20180806T015500	2018	08	06	01:55	63	99.9	0
20180806T020000	2018	08	06	02:00	62.8	99.8	0
20180806T020500	2018	08	06	02:05	62.4	99.9	0
20180806T021000	2018	08	06	02:10	62.8	100	0
20180806T021500	2018	08	06	02:15	62.5	99.9	0
20180806T022000	2018	08	06	02:20	62.4	99.9	0
20180806T022500	2018	08	06	02:25	62	99.9	0
20180806T023000	2018	08	06	02:30	61.6	99.8	0
20180806T023500	2018	08	06	02:35	62.3	100	0
20180806T024000	2018	08	06	02:40	62.6	100	0
20180806T024500	2018	08	06	02:45	62.8	100	0
20180806T025000	2018	08	06	02:50	62.1	100	0
20180806T025500	2018	08	06	02:55	62.1	100	0
20180806T030000	2018	08	06	03:00	62.4	100	0
20180806T030500	2018	08	06	03:05	61.9	100	0
20180806T031000	2018	08	06	03:10	62.5	100	0
20180806T031500	2018	08	06	03:15	61.4	99.9	0
20180806T032000	2018	08	06	03:20	62.7	100	0
20180806T032500	2018	08	06	03:25	63.3	100	0
20180806T033000	2018	08	06	03:30	61.3	99.8	0
20180806T033500	2018	08	06	03:35	61.4	100	0
20180806T034000	2018	08	06	03:40	61.5	100	0
20180806T034500	2018	08	06	03:45	61.7	100	0
20180806T035000	2018	08	06	03:50	61.8	100	0
20180806T035500	2018	08	06	03:55	62.1	100	0
20180806T040000	2018	08	06	04:00	62.6	100	0
20180806T040500	2018	08	06	04:05	61.6	100	0
20180806T041000	2018	08	06	04:10	61.3	100	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180806T041500	2018	08	06	04:15	61.2	100	0
20180806T042000	2018	08	06	04:20	61.6	100	0
20180806T042500	2018	08	06	04:25	61.2	100	0
20180806T043000	2018	08	06	04:30	61.3	100	0
20180806T043500	2018	08	06	04:35	60.5	100	0
20180806T044000	2018	08	06	04:40	60.4	100	0
20180806T044500	2018	08	06	04:45	60.8	100	0
20180806T045000	2018	08	06	04:50	60.6	100	0
20180806T045500	2018	08	06	04:55	60	100	0
20180806T050000	2018	08	06	05:00	60.3	100	0
20180806T050500	2018	08	06	05:05	59.3	100	0
20180806T051000	2018	08	06	05:10	60	100	0
20180806T051500	2018	08	06	05:15	60.7	100	0
20180806T052000	2018	08	06	05:20	61	100	0
20180806T052500	2018	08	06	05:25	61.4	100	0
20180806T053000	2018	08	06	05:30	60.9	100	0
20180806T053500	2018	08	06	05:35	60.9	100	0
20180806T054000	2018	08	06	05:40	61.3	100	0
20180806T054500	2018	08	06	05:45	61.4	100	0
20180806T055000	2018	08	06	05:50	60.3	100	0
20180806T055500	2018	08	06	05:55	61.4	100	0
20180806T060000	2018	08	06	06:00	60.1	100	0
20180806T060500	2018	08	06	06:05	61	100	0
20180806T061000	2018	08	06	06:10	61.4	100	0
20180806T061500	2018	08	06	06:15	61	100	0
20180806T062000	2018	08	06	06:20	60.9	100	0
20180806T062500	2018	08	06	06:25	60.8	100	0
20180806T063000	2018	08	06	06:30	61.3	100	0
20180806T063500	2018	08	06	06:35	61.5	100	0
20180806T064000	2018	08	06	06:40	61.9	100	0
20180806T064500	2018	08	06	06:45	61.9	100	0
20180806T065000	2018	08	06	06:50	62.4	100	0
20180806T065500	2018	08	06	06:55	62.9	100	0
20180806T070000	2018	08	06	07:00	64.1	100	0
20180806T070500	2018	08	06	07:05	65.4	100	0
20180806T071000	2018	08	06	07:10	66.2	99.9	0
20180806T071500	2018	08	06	07:15	66.5	99.8	0
20180806T072000	2018	08	06	07:20	66.6	99.6	0
20180806T072500	2018	08	06	07:25	66.9	99.2	0
20180806T073000	2018	08	06	07:30	67.3	98.2	0
20180806T073500	2018	08	06	07:35	67.6	97.5	0
20180806T074000	2018	08	06	07:40	67.8	96.6	0
20180806T074500	2018	08	06	07:45	67.9	95.7	0
20180806T075000	2018	08	06	07:50	68.2	93.6	0
20180806T075500	2018	08	06	07:55	68.3	91.7	0
20180806T080000	2018	08	06	08:00	68.4	90.8	0
20180806T080500	2018	08	06	08:05	68.8	90.8	0
20180806T081000	2018	08	06	08:10	68.7	89.1	0
20180806T081500	2018	08	06	08:15	68.8	87.7	0
20180806T082000	2018	08	06	08:20	69.6	87.3	0
20180806T082500	2018	08	06	08:25	71.1	87.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180806T083000	2018	08	06	08:30	71.6	86.9	0
20180806T083500	2018	08	06	08:35	71.6	86.2	0
20180806T084000	2018	08	06	08:40	71.9	84.9	0
20180806T084500	2018	08	06	08:45	72.6	85.6	0
20180806T085000	2018	08	06	08:50	72.6	83.2	0
20180806T085500	2018	08	06	08:55	73.3	83.9	0
20180806T090000	2018	08	06	09:00	73.5	83.7	0
20180806T090500	2018	08	06	09:05	73.4	82.3	0
20180806T091000	2018	08	06	09:10	74.4	81.4	0
20180806T091500	2018	08	06	09:15	74.3	79.4	0
20180806T092000	2018	08	06	09:20	75.5	79.8	0
20180806T092500	2018	08	06	09:25	75.2	76.6	0
20180806T093000	2018	08	06	09:30	75.7	76.6	0
20180806T093500	2018	08	06	09:35	76	75.9	0
20180806T094000	2018	08	06	09:40	76.8	76.8	0
20180806T094500	2018	08	06	09:45	76.9	75.1	0
20180806T095000	2018	08	06	09:50	77	74.4	0
20180806T095500	2018	08	06	09:55	77.4	73.8	0
20180806T100000	2018	08	06	10:00	77.7	73.9	0
20180806T100500	2018	08	06	10:05	78.1	73.5	0
20180806T101000	2018	08	06	10:10	78.7	72.4	0
20180806T101500	2018	08	06	10:15	79.1	72.4	0
20180806T102000	2018	08	06	10:20	79.3	71.8	0
20180806T102500	2018	08	06	10:25	79.6	72.5	0
20180806T103000	2018	08	06	10:30	79.9	71.9	0
20180806T103500	2018	08	06	10:35	79.8	72.2	0
20180806T104000	2018	08	06	10:40	80.1	71.5	0
20180806T104500	2018	08	06	10:45	80.4	71.5	0
20180806T105000	2018	08	06	10:50	80.5	71.9	0
20180806T105500	2018	08	06	10:55	80.6	71	0
20180806T110000	2018	08	06	11:00	81.5	71.9	0
20180806T110500	2018	08	06	11:05	81.8	70.1	0
20180806T111000	2018	08	06	11:10	81.4	69.1	0
20180806T111500	2018	08	06	11:15	82.1	69.6	0
20180806T112000	2018	08	06	11:20	82.1	69.1	0
20180806T112500	2018	08	06	11:25	82.4	69.9	0
20180806T113000	2018	08	06	11:30	82.8	69.2	0
20180806T113500	2018	08	06	11:35	82.9	68.4	0
20180806T114000	2018	08	06	11:40	83.9	69.4	0
20180806T114500	2018	08	06	11:45	83.5	66.7	0
20180806T115000	2018	08	06	11:50	83.6	67.5	0
20180806T115500	2018	08	06	11:55	84	66.6	0
20180806T120000	2018	08	06	12:00	84.2	66.5	0
20180806T120500	2018	08	06	12:05	85.2	66.8	0
20180806T121000	2018	08	06	12:10	85	62.9	0
20180806T121500	2018	08	06	12:15	85.1	62.9	0
20180806T122000	2018	08	06	12:20	85.3	62.3	0
20180806T122500	2018	08	06	12:25	85.4	60.7	0
20180806T123000	2018	08	06	12:30	85.7	60.6	0
20180806T123500	2018	08	06	12:35	86	60.7	0
20180806T124000	2018	08	06	12:40	86	59.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180806T124500	2018	08	06	12:45	86	59.8	0
20180806T125000	2018	08	06	12:50	86.4	60	0
20180806T125500	2018	08	06	12:55	86.2	59.2	0
20180806T130000	2018	08	06	13:00	86.7	60.2	0
20180806T130500	2018	08	06	13:05	86.9	59.5	0
20180806T131000	2018	08	06	13:10	87	59.9	0
20180806T131500	2018	08	06	13:15	86.8	58	0
20180806T132000	2018	08	06	13:20	87.2	58.2	0
20180806T132500	2018	08	06	13:25	87.1	58.3	0
20180806T133000	2018	08	06	13:30	87.2	57.8	0
20180806T133500	2018	08	06	13:35	86.9	58.1	0
20180806T134000	2018	08	06	13:40	87.3	58.8	0
20180806T134500	2018	08	06	13:45	86.6	58.9	0
20180806T135000	2018	08	06	13:50	87	58.5	0
20180806T135500	2018	08	06	13:55	87.1	57.2	0
20180806T140000	2018	08	06	14:00	87.4	58.6	0
20180806T140500	2018	08	06	14:05	87.7	60.2	0
20180806T141000	2018	08	06	14:10	87.9	60.1	0
20180806T141500	2018	08	06	14:15	87.7	58.7	0
20180806T142000	2018	08	06	14:20	86.5	57.7	0
20180806T142500	2018	08	06	14:25	87.4	57.5	0
20180806T143000	2018	08	06	14:30	87.7	57.2	0
20180806T143500	2018	08	06	14:35	88.2	57.3	0
20180806T144000	2018	08	06	14:40	87.8	55.4	0
20180806T144500	2018	08	06	14:45	88.1	57.5	0
20180806T145000	2018	08	06	14:50	87.3	56.9	0
20180806T145500	2018	08	06	14:55	87.6	57	0
20180806T150000	2018	08	06	15:00	87.2	58	0
20180806T150500	2018	08	06	15:05	87.5	57.5	0
20180806T151000	2018	08	06	15:10	87.5	57.6	0
20180806T151500	2018	08	06	15:15	87.9	57.6	0
20180806T152000	2018	08	06	15:20	87.4	56.5	0
20180806T152500	2018	08	06	15:25	88.9	53.2	0
20180806T153000	2018	08	06	15:30	88.9	50.2	0
20180806T153500	2018	08	06	15:35	88.6	49.9	0
20180806T154000	2018	08	06	15:40	88.8	49.7	0
20180806T154500	2018	08	06	15:45	88.9	49	0
20180806T155000	2018	08	06	15:50	89.3	50.8	0
20180806T155500	2018	08	06	15:55	88.9	50.2	0
20180806T160000	2018	08	06	16:00	89.2	50	0
20180806T160500	2018	08	06	16:05	89.4	50.1	0
20180806T161000	2018	08	06	16:10	89.1	49.6	0
20180806T161500	2018	08	06	16:15	89.1	51.1	0
20180806T162000	2018	08	06	16:20	89.5	51.3	0
20180806T162500	2018	08	06	16:25	89.1	47.7	0
20180806T163000	2018	08	06	16:30	89	49.9	0
20180806T163500	2018	08	06	16:35	89	48.6	0
20180806T164000	2018	08	06	16:40	89	50.3	0
20180806T164500	2018	08	06	16:45	89.1	49.6	0
20180806T165000	2018	08	06	16:50	89.1	52.6	0
20180806T165500	2018	08	06	16:55	89	52.4	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180806T170000	2018	08	06	17:00	88.9	52.7	0
20180806T170500	2018	08	06	17:05	88.9	53.7	0
20180806T171000	2018	08	06	17:10	89.1	54.1	0
20180806T171500	2018	08	06	17:15	88.9	51.8	0
20180806T172000	2018	08	06	17:20	88.6	48.9	0
20180806T172500	2018	08	06	17:25	88.7	47.9	0
20180806T173000	2018	08	06	17:30	88.6	50.3	0
20180806T173500	2018	08	06	17:35	88.3	49.9	0
20180806T174000	2018	08	06	17:40	88	50.9	0
20180806T174500	2018	08	06	17:45	87.9	51.5	0
20180806T175000	2018	08	06	17:50	87.8	53.1	0
20180806T175500	2018	08	06	17:55	87.8	53.1	0
20180806T180000	2018	08	06	18:00	87.9	56.9	0
20180806T180500	2018	08	06	18:05	87.5	55.3	0
20180806T181000	2018	08	06	18:10	87	56.4	0
20180806T181500	2018	08	06	18:15	86.4	58.8	0
20180806T182000	2018	08	06	18:20	86.4	60.6	0
20180806T182500	2018	08	06	18:25	86.6	61.1	0
20180806T183000	2018	08	06	18:30	87.1	62.3	0
20180806T183500	2018	08	06	18:35	87.2	61.5	0
20180806T184000	2018	08	06	18:40	86.8	62.6	0
20180806T184500	2018	08	06	18:45	86.5	61	0
20180806T185000	2018	08	06	18:50	86.2	60.7	0
20180806T185500	2018	08	06	18:55	85.8	62.5	0
20180806T190000	2018	08	06	19:00	85.6	62.9	0
20180806T190500	2018	08	06	19:05	85.1	63.1	0
20180806T191000	2018	08	06	19:10	84.4	63.1	0
20180806T191500	2018	08	06	19:15	84	63	0
20180806T192000	2018	08	06	19:20	82.5	68.8	0
20180806T192500	2018	08	06	19:25	81.4	72.1	0
20180806T193000	2018	08	06	19:30	79.4	79.9	0
20180806T193500	2018	08	06	19:35	78.4	83.6	0
20180806T194000	2018	08	06	19:40	77.7	84.9	0
20180806T194500	2018	08	06	19:45	77	85	0
20180806T195000	2018	08	06	19:50	76.8	87.4	0
20180806T195500	2018	08	06	19:55	75.8	89.1	0
20180806T200000	2018	08	06	20:00	75.4	89.2	0
20180806T200500	2018	08	06	20:05	75.5	89.1	0
20180806T201000	2018	08	06	20:10	77.3	82.3	0
20180806T201500	2018	08	06	20:15	79.6	67.8	0
20180806T202000	2018	08	06	20:20	79.4	66	0
20180806T202500	2018	08	06	20:25	79.1	65.7	0
20180806T203000	2018	08	06	20:30	78.5	66.2	0
20180806T203500	2018	08	06	20:35	78.5	65.9	0
20180806T204000	2018	08	06	20:40	78.1	65.4	0
20180806T204500	2018	08	06	20:45	77.9	64.9	0
20180806T205000	2018	08	06	20:50	77.6	64.4	0
20180806T205500	2018	08	06	20:55	77.3	64.3	0
20180806T210000	2018	08	06	21:00	77	64.3	0
20180806T210500	2018	08	06	21:05	76.8	64.2	0
20180806T211000	2018	08	06	21:10	75.6	66	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180806T211500	2018	08	06	21:15	74.9	68.7	0
20180806T212000	2018	08	06	21:20	74.6	70.1	0
20180806T212500	2018	08	06	21:25	74.1	70.3	0
20180806T213000	2018	08	06	21:30	73.4	71.3	0
20180806T213500	2018	08	06	21:35	72.6	72.6	0
20180806T214000	2018	08	06	21:40	72.6	73.9	0
20180806T214500	2018	08	06	21:45	72	74.9	0
20180806T215000	2018	08	06	21:50	72	76.3	0
20180806T215500	2018	08	06	21:55	72.4	75.9	0
20180806T220000	2018	08	06	22:00	70.9	77	0
20180806T220500	2018	08	06	22:05	71	79	0
20180806T221000	2018	08	06	22:10	70.4	79.8	0
20180806T221500	2018	08	06	22:15	70.4	80.3	0
20180806T222000	2018	08	06	22:20	69.8	81.4	0
20180806T222500	2018	08	06	22:25	69.5	82.7	0
20180806T223000	2018	08	06	22:30	70.3	81.5	0
20180806T223500	2018	08	06	22:35	68.7	82.1	0
20180806T224000	2018	08	06	22:40	68.5	84.8	0
20180806T224500	2018	08	06	22:45	69	86.2	0
20180806T225000	2018	08	06	22:50	68.1	86.7	0
20180806T225500	2018	08	06	22:55	67.7	87.5	0
20180806T230000	2018	08	06	23:00	67.5	87.9	0
20180806T230500	2018	08	06	23:05	67.2	91.3	0
20180806T231000	2018	08	06	23:10	66.9	91.2	0
20180806T231500	2018	08	06	23:15	67.2	91.5	0
20180806T232000	2018	08	06	23:20	66.7	90.9	0
20180806T232500	2018	08	06	23:25	66	92	0
20180806T233000	2018	08	06	23:30	65.8	92.9	0
20180806T233500	2018	08	06	23:35	65.7	92.1	0
20180806T234000	2018	08	06	23:40	65.8	92.8	0
20180806T234500	2018	08	06	23:45	65.8	93.7	0
20180806T235000	2018	08	06	23:50	65	95.1	0
20180806T235500	2018	08	06	23:55	65.2	96.3	0
20180807T000000	2018	08	07	00:00	65.5	95.7	0
20180807T000500	2018	08	07	00:05	64.9	96.2	0
20180807T001000	2018	08	07	00:10	64.3	96.2	0
20180807T001500	2018	08	07	00:15	64.9	97	0
20180807T002000	2018	08	07	00:20	65.7	96.8	0
20180807T002500	2018	08	07	00:25	65.5	96.3	0
20180807T003000	2018	08	07	00:30	65.2	95.6	0
20180807T003500	2018	08	07	00:35	64.6	96.1	0
20180807T004000	2018	08	07	00:40	65.6	96.1	0
20180807T004500	2018	08	07	00:45	65.4	95.1	0
20180807T005000	2018	08	07	00:50	66.2	94.3	0
20180807T005500	2018	08	07	00:55	65.2	93	0
20180807T010000	2018	08	07	01:00	65.1	94.5	0
20180807T010500	2018	08	07	01:05	66	94.2	0
20180807T011000	2018	08	07	01:10	67.5	92.2	0
20180807T011500	2018	08	07	01:15	68.3	89.8	0
20180807T012000	2018	08	07	01:20	66.3	89.1	0
20180807T012500	2018	08	07	01:25	66.7	92	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180807T013000	2018	08	07	01:30	66.4	92.4	0
20180807T013500	2018	08	07	01:35	66.5	92.8	0
20180807T014000	2018	08	07	01:40	66.5	92.9	0
20180807T014500	2018	08	07	01:45	66.7	91.9	0
20180807T015000	2018	08	07	01:50	67.6	90.6	0
20180807T015500	2018	08	07	01:55	67.6	90.4	0
20180807T020000	2018	08	07	02:00	67.1	90.4	0
20180807T020500	2018	08	07	02:05	65.4	90.5	0
20180807T021000	2018	08	07	02:10	65.6	94.9	0
20180807T021500	2018	08	07	02:15	64.9	94.8	0
20180807T022000	2018	08	07	02:20	65.2	96.7	0
20180807T022500	2018	08	07	02:25	65	97.6	0
20180807T023000	2018	08	07	02:30	65	97.7	0
20180807T023500	2018	08	07	02:35	64.8	97.8	0
20180807T024000	2018	08	07	02:40	64.7	98	0
20180807T024500	2018	08	07	02:45	65.2	96.5	0
20180807T025000	2018	08	07	02:50	64.5	95.2	0
20180807T025500	2018	08	07	02:55	64.2	97.2	0
20180807T030000	2018	08	07	03:00	64.4	97.9	0
20180807T030500	2018	08	07	03:05	64.4	98.1	0
20180807T031000	2018	08	07	03:10	65.4	98.9	0
20180807T031500	2018	08	07	03:15	65.7	98.1	0
20180807T032000	2018	08	07	03:20	65.7	98.1	0
20180807T032500	2018	08	07	03:25	65.1	97.2	0
20180807T033000	2018	08	07	03:30	64.8	97.1	0
20180807T033500	2018	08	07	03:35	65.1	97.9	0
20180807T034000	2018	08	07	03:40	65.4	97.8	0
20180807T034500	2018	08	07	03:45	65.2	97.6	0
20180807T035000	2018	08	07	03:50	65	97.4	0
20180807T035500	2018	08	07	03:55	65.1	97.4	0
20180807T040000	2018	08	07	04:00	64.7	96.9	0
20180807T040500	2018	08	07	04:05	63.9	97.1	0
20180807T041000	2018	08	07	04:10	63.8	97.6	0
20180807T041500	2018	08	07	04:15	64	98.2	0
20180807T042000	2018	08	07	04:20	64.5	98.8	0
20180807T042500	2018	08	07	04:25	63.7	98.4	0
20180807T043000	2018	08	07	04:30	63	98	0
20180807T043500	2018	08	07	04:35	63.3	98.6	0
20180807T044000	2018	08	07	04:40	63.6	99.2	0
20180807T044500	2018	08	07	04:45	62.8	98.8	0
20180807T045000	2018	08	07	04:50	63.1	99.1	0
20180807T045500	2018	08	07	04:55	63.5	99.4	0
20180807T050000	2018	08	07	05:00	63	99.3	0
20180807T050500	2018	08	07	05:05	63.3	99.4	0
20180807T051000	2018	08	07	05:10	62.9	99.4	0
20180807T051500	2018	08	07	05:15	63.3	99.5	0
20180807T052000	2018	08	07	05:20	62.8	99.5	0
20180807T052500	2018	08	07	05:25	63.1	99.5	0
20180807T053000	2018	08	07	05:30	63.2	99.6	0
20180807T053500	2018	08	07	05:35	62.3	99.4	0
20180807T054000	2018	08	07	05:40	62.3	99.4	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180807T054500	2018	08	07	05:45	61.9	99.4	0
20180807T055000	2018	08	07	05:50	61.8	99.4	0
20180807T055500	2018	08	07	05:55	62.2	99.6	0
20180807T060000	2018	08	07	06:00	62.2	99.6	0
20180807T060500	2018	08	07	06:05	63	99.8	0
20180807T061000	2018	08	07	06:10	63.3	99.8	0
20180807T061500	2018	08	07	06:15	62.7	99.7	0
20180807T062000	2018	08	07	06:20	62.7	99.7	0
20180807T062500	2018	08	07	06:25	63.1	99.7	0
20180807T063000	2018	08	07	06:30	63.5	99.7	0
20180807T063500	2018	08	07	06:35	63.7	99.7	0
20180807T064000	2018	08	07	06:40	64.1	99.7	0
20180807T064500	2018	08	07	06:45	64	99.5	0
20180807T065000	2018	08	07	06:50	64	99.3	0
20180807T065500	2018	08	07	06:55	64.3	99.4	0
20180807T070000	2018	08	07	07:00	64.6	99.4	0
20180807T070500	2018	08	07	07:05	65.2	99.5	0
20180807T071000	2018	08	07	07:10	66.1	99.3	0
20180807T071500	2018	08	07	07:15	66.7	98.4	0
20180807T072000	2018	08	07	07:20	67.2	96.6	0
20180807T072500	2018	08	07	07:25	68	95.3	0
20180807T073000	2018	08	07	07:30	68.7	92.7	0
20180807T073500	2018	08	07	07:35	69	90.4	0
20180807T074000	2018	08	07	07:40	69.2	89.1	0
20180807T074500	2018	08	07	07:45	69.8	88.9	0
20180807T075000	2018	08	07	07:50	70.6	86.5	0
20180807T075500	2018	08	07	07:55	71.4	83.4	0
20180807T080000	2018	08	07	08:00	71.6	82.2	0
20180807T080500	2018	08	07	08:05	72.1	81.1	0
20180807T081000	2018	08	07	08:10	72.3	80.4	0
20180807T081500	2018	08	07	08:15	73.1	79.4	0
20180807T082000	2018	08	07	08:20	73.5	76.9	0
20180807T082500	2018	08	07	08:25	73.5	77.8	0
20180807T083000	2018	08	07	08:30	73.9	77.2	0
20180807T083500	2018	08	07	08:35	73.8	75.6	0
20180807T084000	2018	08	07	08:40	74.2	75.8	0
20180807T084500	2018	08	07	08:45	74.9	75.8	0
20180807T085000	2018	08	07	08:50	75.2	77.9	0
20180807T085500	2018	08	07	08:55	75.9	79.9	0
20180807T090000	2018	08	07	09:00	76.9	78.7	0
20180807T090500	2018	08	07	09:05	77.2	77.9	0
20180807T091000	2018	08	07	09:10	77.6	77.3	0
20180807T091500	2018	08	07	09:15	77.7	74.9	0
20180807T092000	2018	08	07	09:20	77.6	74.9	0
20180807T092500	2018	08	07	09:25	78.1	75.4	0
20180807T093000	2018	08	07	09:30	78.6	74.7	0
20180807T093500	2018	08	07	09:35	79.1	75.1	0
20180807T094000	2018	08	07	09:40	78.9	74	0
20180807T094500	2018	08	07	09:45	78.7	75.3	0
20180807T095000	2018	08	07	09:50	79	74.5	0
20180807T095500	2018	08	07	09:55	78.7	75.5	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180807T100000	2018	08	07	10:00	78.7	75.9	0
20180807T100500	2018	08	07	10:05	79.5	75.9	0
20180807T101000	2018	08	07	10:10	79.9	75	0
20180807T101500	2018	08	07	10:15	80.1	75	0
20180807T102000	2018	08	07	10:20	80.4	74.4	0
20180807T102500	2018	08	07	10:25	80.1	74.4	0
20180807T103000	2018	08	07	10:30	80.6	74.9	0
20180807T103500	2018	08	07	10:35	80.8	73	0
20180807T104000	2018	08	07	10:40	81	73.1	0
20180807T104500	2018	08	07	10:45	81	72.3	0
20180807T105000	2018	08	07	10:50	80.5	73	0
20180807T105500	2018	08	07	10:55	81.3	72.3	0
20180807T110000	2018	08	07	11:00	81.5	71.4	0
20180807T110500	2018	08	07	11:05	81.5	70.7	0
20180807T111000	2018	08	07	11:10	81.1	70.5	0
20180807T111500	2018	08	07	11:15	81.9	70.9	0
20180807T112000	2018	08	07	11:20	81.8	70.4	0
20180807T112500	2018	08	07	11:25	81.3	70.4	0
20180807T113000	2018	08	07	11:30	82.4	71.5	0
20180807T113500	2018	08	07	11:35	81.5	70.4	0
20180807T114000	2018	08	07	11:40	81.8	70.8	0
20180807T114500	2018	08	07	11:45	82	69.5	0
20180807T115000	2018	08	07	11:50	82.2	70	0
20180807T115500	2018	08	07	11:55	81.9	69.6	0
20180807T120000	2018	08	07	12:00	82.5	69.2	0
20180807T120500	2018	08	07	12:05	82.9	69.3	0
20180807T121000	2018	08	07	12:10	83.1	68.5	0
20180807T121500	2018	08	07	12:15	83.4	69	0
20180807T122000	2018	08	07	12:20	83.9	67	0
20180807T122500	2018	08	07	12:25	83.6	67.2	0
20180807T123000	2018	08	07	12:30	84.1	68	0
20180807T123500	2018	08	07	12:35	84.6	66.9	0
20180807T124000	2018	08	07	12:40	83.2	66.3	0
20180807T124500	2018	08	07	12:45	83.7	67.3	0
20180807T125000	2018	08	07	12:50	84.8	67	0
20180807T125500	2018	08	07	12:55	85.2	65.4	0
20180807T130000	2018	08	07	13:00	85.5	65.6	0
20180807T130500	2018	08	07	13:05	85.1	65.2	0
20180807T131000	2018	08	07	13:10	84.2	66.2	0
20180807T131500	2018	08	07	13:15	82.8	68.5	0
20180807T132000	2018	08	07	13:20	82.3	70	0
20180807T132500	2018	08	07	13:25	81.1	72.3	0
20180807T133000	2018	08	07	13:30	79	75.9	0
20180807T133500	2018	08	07	13:35	78.2	80.3	0
20180807T134000	2018	08	07	13:40	77.5	82.1	0
20180807T134500	2018	08	07	13:45	77.5	83	0
20180807T135000	2018	08	07	13:50	77.3	84.7	0
20180807T135500	2018	08	07	13:55	77.2	85.6	0
20180807T140000	2018	08	07	14:00	77.6	84.5	0
20180807T140500	2018	08	07	14:05	77.6	85	0
20180807T141000	2018	08	07	14:10	77.6	86.3	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180807T141500	2018	08	07	14:15	77.4	88.5	0
20180807T142000	2018	08	07	14:20	77.3	89.1	0
20180807T142500	2018	08	07	14:25	77.2	89.6	0
20180807T143000	2018	08	07	14:30	77.2	89.2	0
20180807T143500	2018	08	07	14:35	76.8	89.1	0
20180807T144000	2018	08	07	14:40	76.6	88.7	0
20180807T144500	2018	08	07	14:45	77.3	88	0
20180807T145000	2018	08	07	14:50	77.5	86.6	0
20180807T145500	2018	08	07	14:55	78.2	86.3	0
20180807T150000	2018	08	07	15:00	78.4	84.8	0
20180807T150500	2018	08	07	15:05	79.3	84.1	0
20180807T151000	2018	08	07	15:10	79.7	81.5	0
20180807T151500	2018	08	07	15:15	80.3	80.4	0
20180807T152000	2018	08	07	15:20	80.4	77.3	0
20180807T152500	2018	08	07	15:25	80.2	75	0
20180807T153000	2018	08	07	15:30	79.8	74.7	0
20180807T153500	2018	08	07	15:35	79.5	77.1	0
20180807T154000	2018	08	07	15:40	79.2	76.4	0
20180807T154500	2018	08	07	15:45	78.7	77.9	0
20180807T155000	2018	08	07	15:50	78.4	81	0
20180807T155500	2018	08	07	15:55	78.2	79.9	0
20180807T160000	2018	08	07	16:00	77.6	81.4	0
20180807T160500	2018	08	07	16:05	76.7	85.3	0.01
20180807T161000	2018	08	07	16:10	76	88.7	0.01
20180807T161500	2018	08	07	16:15	75.3	90.8	0.01
20180807T162000	2018	08	07	16:20	75	93.1	0
20180807T162500	2018	08	07	16:25	75.2	94.4	0
20180807T163000	2018	08	07	16:30	75.6	94.4	0
20180807T163500	2018	08	07	16:35	75.9	94.6	0
20180807T164000	2018	08	07	16:40	75.9	94	0
20180807T164500	2018	08	07	16:45	76	94.1	0
20180807T165000	2018	08	07	16:50	76.1	93.1	0
20180807T165500	2018	08	07	16:55	76.3	92.8	0
20180807T170000	2018	08	07	17:00	76.4	92.2	0
20180807T170500	2018	08	07	17:05	76.7	92.3	0
20180807T171000	2018	08	07	17:10	76.8	91.9	0
20180807T171500	2018	08	07	17:15	77.3	91.6	0
20180807T172000	2018	08	07	17:20	78.2	88.1	0
20180807T172500	2018	08	07	17:25	78	85.4	0
20180807T173000	2018	08	07	17:30	78	86.9	0
20180807T173500	2018	08	07	17:35	78.1	85.6	0
20180807T174000	2018	08	07	17:40	77.8	85.5	0
20180807T174500	2018	08	07	17:45	77.7	86.4	0
20180807T175000	2018	08	07	17:50	77.4	87.5	0
20180807T175500	2018	08	07	17:55	76.8	88.9	0
20180807T180000	2018	08	07	18:00	77.2	89.9	0
20180807T180500	2018	08	07	18:05	77.4	88.7	0
20180807T181000	2018	08	07	18:10	76.8	89.2	0
20180807T181500	2018	08	07	18:15	77.4	88.6	0
20180807T182000	2018	08	07	18:20	77.4	87.3	0
20180807T182500	2018	08	07	18:25	76.9	87.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180807T183000	2018	08	07	18:30	76.8	88.4	0
20180807T183500	2018	08	07	18:35	77.6	88.2	0
20180807T184000	2018	08	07	18:40	77.7	86.8	0
20180807T184500	2018	08	07	18:45	77.6	86.1	0
20180807T185000	2018	08	07	18:50	77.5	85.1	0
20180807T185500	2018	08	07	18:55	77.3	85.8	0
20180807T190000	2018	08	07	19:00	77.1	86	0
20180807T190500	2018	08	07	19:05	77	86.1	0
20180807T191000	2018	08	07	19:10	76.8	86.8	0
20180807T191500	2018	08	07	19:15	76.8	86.1	0
20180807T192000	2018	08	07	19:20	76.5	86.9	0
20180807T192500	2018	08	07	19:25	76.3	87.5	0
20180807T193000	2018	08	07	19:30	76.2	87.7	0
20180807T193500	2018	08	07	19:35	76.1	87.5	0
20180807T194000	2018	08	07	19:40	75.9	88.1	0
20180807T194500	2018	08	07	19:45	75.7	87.8	0
20180807T195000	2018	08	07	19:50	75.5	87.7	0
20180807T195500	2018	08	07	19:55	75.4	87.4	0
20180807T200000	2018	08	07	20:00	75	87.3	0
20180807T200500	2018	08	07	20:05	74.7	87.8	0
20180807T201000	2018	08	07	20:10	74.7	87.8	0
20180807T201500	2018	08	07	20:15	74.3	87.1	0
20180807T202000	2018	08	07	20:20	73.8	87.9	0
20180807T202500	2018	08	07	20:25	73.5	89.1	0
20180807T203000	2018	08	07	20:30	73.4	88.8	0
20180807T203500	2018	08	07	20:35	73.1	89.5	0
20180807T204000	2018	08	07	20:40	70.7	93.3	0
20180807T204500	2018	08	07	20:45	71.4	94.9	0
20180807T205000	2018	08	07	20:50	71.8	94.2	0
20180807T205500	2018	08	07	20:55	70.9	93.7	0
20180807T210000	2018	08	07	21:00	72	93.8	0
20180807T210500	2018	08	07	21:05	72.3	90.3	0
20180807T211000	2018	08	07	21:10	71.4	91.4	0
20180807T211500	2018	08	07	21:15	71.9	92.8	0
20180807T212000	2018	08	07	21:20	72	92.8	0
20180807T212500	2018	08	07	21:25	71.7	92.6	0
20180807T213000	2018	08	07	21:30	71	93	0
20180807T213500	2018	08	07	21:35	70.2	93.4	0
20180807T214000	2018	08	07	21:40	70.5	95.3	0
20180807T214500	2018	08	07	21:45	71	95.8	0
20180807T215000	2018	08	07	21:50	71.2	95	0
20180807T215500	2018	08	07	21:55	70.9	93.9	0
20180807T220000	2018	08	07	22:00	69.7	92.5	0
20180807T220500	2018	08	07	22:05	68.1	94.3	0
20180807T221000	2018	08	07	22:10	69.5	96.8	0
20180807T221500	2018	08	07	22:15	69	96.2	0
20180807T222000	2018	08	07	22:20	68.5	96.9	0
20180807T222500	2018	08	07	22:25	69.1	97	0
20180807T223000	2018	08	07	22:30	69.3	96.8	0
20180807T223500	2018	08	07	22:35	69.2	97.7	0
20180807T224000	2018	08	07	22:40	69.2	97.4	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180807T224500	2018	08	07	22:45	69.2	97.1	0
20180807T225000	2018	08	07	22:50	69.3	96.7	0
20180807T225500	2018	08	07	22:55	69.8	95.4	0
20180807T230000	2018	08	07	23:00	69.2	94.8	0
20180807T230500	2018	08	07	23:05	69	95.7	0
20180807T231000	2018	08	07	23:10	69.3	96.2	0
20180807T231500	2018	08	07	23:15	69.3	96.2	0
20180807T232000	2018	08	07	23:20	69.1	96.3	0
20180807T232500	2018	08	07	23:25	68.9	96.5	0
20180807T233000	2018	08	07	23:30	67.2	95.1	0
20180807T233500	2018	08	07	23:35	66.6	97.1	0
20180807T234000	2018	08	07	23:40	67.8	98.6	0
20180807T234500	2018	08	07	23:45	68.5	98.4	0
20180807T235000	2018	08	07	23:50	68.4	97.8	0
20180807T235500	2018	08	07	23:55	67.6	97.3	0
20180808T000000	2018	08	08	00:00	67.4	97.8	0
20180808T000500	2018	08	08	00:05	67.6	98.3	0
20180808T001000	2018	08	08	00:10	68.2	99	0
20180808T001500	2018	08	08	00:15	68.2	98.2	0
20180808T002000	2018	08	08	00:20	67.8	97.9	0
20180808T002500	2018	08	08	00:25	67.8	98.5	0
20180808T003000	2018	08	08	00:30	67.7	98.2	0
20180808T003500	2018	08	08	00:35	67	98.2	0
20180808T004000	2018	08	08	00:40	66.5	98.6	0
20180808T004500	2018	08	08	00:45	66.4	98.7	0
20180808T005000	2018	08	08	00:50	66.2	99	0
20180808T005500	2018	08	08	00:55	66.2	99.1	0
20180808T010000	2018	08	08	01:00	67	99.5	0
20180808T010500	2018	08	08	01:05	66.5	99.1	0
20180808T011000	2018	08	08	01:10	66.6	99.2	0
20180808T011500	2018	08	08	01:15	66.2	99.2	0
20180808T012000	2018	08	08	01:20	66.8	99.4	0
20180808T012500	2018	08	08	01:25	66.8	99.6	0
20180808T013000	2018	08	08	01:30	66.8	99.6	0
20180808T013500	2018	08	08	01:35	67.3	99.6	0
20180808T014000	2018	08	08	01:40	67.3	99.6	0
20180808T014500	2018	08	08	01:45	67.1	99.3	0
20180808T015000	2018	08	08	01:50	66.8	99.2	0
20180808T015500	2018	08	08	01:55	66.9	99.4	0
20180808T020000	2018	08	08	02:00	67	99.4	0
20180808T020500	2018	08	08	02:05	66.9	99.4	0
20180808T021000	2018	08	08	02:10	66.8	99.3	0
20180808T021500	2018	08	08	02:15	66.5	99.2	0
20180808T022000	2018	08	08	02:20	67	99.3	0
20180808T022500	2018	08	08	02:25	67.4	99.2	0
20180808T023000	2018	08	08	02:30	67.5	99.2	0
20180808T023500	2018	08	08	02:35	67.9	99.1	0
20180808T024000	2018	08	08	02:40	68.2	98.6	0
20180808T024500	2018	08	08	02:45	68.2	97.8	0
20180808T025000	2018	08	08	02:50	68.3	97.5	0
20180808T025500	2018	08	08	02:55	68.6	97.6	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180808T030000	2018	08	08	03:00	68.5	97.9	0
20180808T030500	2018	08	08	03:05	68.4	97.6	0
20180808T031000	2018	08	08	03:10	68.3	97.8	0
20180808T031500	2018	08	08	03:15	68.3	98	0
20180808T032000	2018	08	08	03:20	68.1	98	0
20180808T032500	2018	08	08	03:25	67.5	97.8	0
20180808T033000	2018	08	08	03:30	67.2	98.3	0
20180808T033500	2018	08	08	03:35	66.9	98.6	0
20180808T034000	2018	08	08	03:40	67	98.8	0
20180808T034500	2018	08	08	03:45	67.1	98.9	0
20180808T035000	2018	08	08	03:50	67.4	99.1	0
20180808T035500	2018	08	08	03:55	67.2	99.1	0
20180808T040000	2018	08	08	04:00	67	99	0
20180808T040500	2018	08	08	04:05	66.9	99	0
20180808T041000	2018	08	08	04:10	67.2	99.1	0
20180808T041500	2018	08	08	04:15	67.4	99.2	0
20180808T042000	2018	08	08	04:20	67.4	99.2	0
20180808T042500	2018	08	08	04:25	67.5	99.3	0
20180808T043000	2018	08	08	04:30	67.1	99.2	0
20180808T043500	2018	08	08	04:35	67.5	99.2	0
20180808T044000	2018	08	08	04:40	68	99.4	0
20180808T044500	2018	08	08	04:45	68	99.3	0
20180808T045000	2018	08	08	04:50	68.1	99.3	0
20180808T045500	2018	08	08	04:55	67.6	98.9	0
20180808T050000	2018	08	08	05:00	67.4	98.8	0
20180808T050500	2018	08	08	05:05	67.1	98.8	0
20180808T051000	2018	08	08	05:10	66.7	98.7	0
20180808T051500	2018	08	08	05:15	66.9	99	0
20180808T052000	2018	08	08	05:20	67.3	99.4	0
20180808T052500	2018	08	08	05:25	67.6	99.5	0
20180808T053000	2018	08	08	05:30	67.7	99.5	0
20180808T053500	2018	08	08	05:35	67.7	99.5	0
20180808T054000	2018	08	08	05:40	67.5	99.5	0
20180808T054500	2018	08	08	05:45	67.3	99.5	0
20180808T055000	2018	08	08	05:50	67.4	99.5	0
20180808T055500	2018	08	08	05:55	67	99.4	0
20180808T060000	2018	08	08	06:00	67.5	99.5	0
20180808T060500	2018	08	08	06:05	67.5	99.6	0
20180808T061000	2018	08	08	06:10	67.6	99.6	0
20180808T061500	2018	08	08	06:15	67.6	99.6	0
20180808T062000	2018	08	08	06:20	67.5	99.7	0
20180808T062500	2018	08	08	06:25	67.4	99.7	0
20180808T063000	2018	08	08	06:30	67.5	99.7	0
20180808T063500	2018	08	08	06:35	67.6	99.7	0
20180808T064000	2018	08	08	06:40	67.8	99.7	0
20180808T064500	2018	08	08	06:45	67.8	99.7	0
20180808T065000	2018	08	08	06:50	67.8	99.7	0
20180808T065500	2018	08	08	06:55	68	99.7	0
20180808T070000	2018	08	08	07:00	68	99.8	0
20180808T070500	2018	08	08	07:05	68.1	99.8	0
20180808T071000	2018	08	08	07:10	68.1	99.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180808T071500	2018	08	08	07:15	68	99.7	0
20180808T072000	2018	08	08	07:20	67.9	99.7	0
20180808T072500	2018	08	08	07:25	68.2	99.8	0
20180808T073000	2018	08	08	07:30	68.2	99.8	0
20180808T073500	2018	08	08	07:35	68.2	99.7	0
20180808T074000	2018	08	08	07:40	68.1	99.7	0
20180808T074500	2018	08	08	07:45	68	99.7	0
20180808T075000	2018	08	08	07:50	68.2	99.8	0
20180808T075500	2018	08	08	07:55	68.2	99.7	0
20180808T080000	2018	08	08	08:00	68.4	99.7	0
20180808T080500	2018	08	08	08:05	68.5	99.6	0
20180808T081000	2018	08	08	08:10	68.5	99.4	0
20180808T081500	2018	08	08	08:15	68.8	99.4	0
20180808T082000	2018	08	08	08:20	68.7	99.2	0
20180808T082500	2018	08	08	08:25	68.4	99	0
20180808T083000	2018	08	08	08:30	69.1	98.8	0
20180808T083500	2018	08	08	08:35	69.2	97.8	0
20180808T084000	2018	08	08	08:40	69.7	95.8	0
20180808T084500	2018	08	08	08:45	70	93.5	0
20180808T085000	2018	08	08	08:50	70	89.1	0
20180808T085500	2018	08	08	08:55	70.6	88.1	0
20180808T090000	2018	08	08	09:00	70.8	85.9	0
20180808T090500	2018	08	08	09:05	70.7	84.7	0
20180808T091000	2018	08	08	09:10	70.9	83.6	0
20180808T091500	2018	08	08	09:15	71.6	83	0
20180808T092000	2018	08	08	09:20	71.5	84.3	0
20180808T092500	2018	08	08	09:25	71.4	84.2	0
20180808T093000	2018	08	08	09:30	72	82.2	0
20180808T093500	2018	08	08	09:35	72	81.3	0
20180808T094000	2018	08	08	09:40	71.7	79.2	0
20180808T094500	2018	08	08	09:45	73.7	76.8	0
20180808T095000	2018	08	08	09:50	75	76.5	0
20180808T095500	2018	08	08	09:55	75.5	77.2	0
20180808T100000	2018	08	08	10:00	76.1	79.1	0
20180808T100500	2018	08	08	10:05	76	78.5	0
20180808T101000	2018	08	08	10:10	76.5	76.6	0
20180808T101500	2018	08	08	10:15	75.7	75.9	0
20180808T102000	2018	08	08	10:20	75.9	77.2	0
20180808T102500	2018	08	08	10:25	76.5	76	0
20180808T103000	2018	08	08	10:30	76.4	76.8	0
20180808T103500	2018	08	08	10:35	77.7	75.5	0
20180808T104000	2018	08	08	10:40	78.2	74.6	0
20180808T104500	2018	08	08	10:45	77.4	74.2	0
20180808T105000	2018	08	08	10:50	77.4	74.6	0
20180808T105500	2018	08	08	10:55	77.6	75	0
20180808T110000	2018	08	08	11:00	77.7	74	0
20180808T110500	2018	08	08	11:05	77.9	74.3	0
20180808T111000	2018	08	08	11:10	78.4	70.5	0
20180808T111500	2018	08	08	11:15	78.2	70	0
20180808T112000	2018	08	08	11:20	79.1	71.6	0
20180808T112500	2018	08	08	11:25	79.1	72.7	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180808T113000	2018	08	08	11:30	78.9	73	0
20180808T113500	2018	08	08	11:35	79.1	73.7	0
20180808T114000	2018	08	08	11:40	78.4	70.7	0
20180808T114500	2018	08	08	11:45	79.2	72.3	0
20180808T115000	2018	08	08	11:50	79.4	72.8	0
20180808T115500	2018	08	08	11:55	79.3	73.6	0
20180808T120000	2018	08	08	12:00	79.7	70.5	0
20180808T120500	2018	08	08	12:05	79.1	70.1	0
20180808T121000	2018	08	08	12:10	79.3	71.4	0
20180808T121500	2018	08	08	12:15	79.5	72.8	0
20180808T122000	2018	08	08	12:20	80.4	71	0
20180808T122500	2018	08	08	12:25	81.1	70.1	0
20180808T123000	2018	08	08	12:30	81.3	68.5	0
20180808T123500	2018	08	08	12:35	81	68.4	0
20180808T124000	2018	08	08	12:40	80.4	68.3	0
20180808T124500	2018	08	08	12:45	80.1	69.4	0
20180808T125000	2018	08	08	12:50	80.3	71.5	0
20180808T125500	2018	08	08	12:55	80.6	70.2	0
20180808T130000	2018	08	08	13:00	80.3	70.2	0
20180808T130500	2018	08	08	13:05	80.5	70.8	0
20180808T131000	2018	08	08	13:10	80.5	70.6	0
20180808T131500	2018	08	08	13:15	80.1	70.2	0
20180808T132000	2018	08	08	13:20	80.6	69.9	0
20180808T132500	2018	08	08	13:25	81.6	71	0
20180808T133000	2018	08	08	13:30	80.6	68.9	0
20180808T133500	2018	08	08	13:35	80.1	69.9	0
20180808T134000	2018	08	08	13:40	80.7	69.9	0
20180808T134500	2018	08	08	13:45	81	70.9	0
20180808T135000	2018	08	08	13:50	80.9	70	0
20180808T135500	2018	08	08	13:55	80.6	69.5	0
20180808T140000	2018	08	08	14:00	80.5	70.8	0
20180808T140500	2018	08	08	14:05	80.7	70.4	0
20180808T141000	2018	08	08	14:10	80.5	69	0
20180808T141500	2018	08	08	14:15	80.9	71	0
20180808T142000	2018	08	08	14:20	81.1	70.6	0
20180808T142500	2018	08	08	14:25	80.9	69.3	0
20180808T143000	2018	08	08	14:30	81.1	69.3	0
20180808T143500	2018	08	08	14:35	81.6	69	0
20180808T144000	2018	08	08	14:40	81.9	69.2	0
20180808T144500	2018	08	08	14:45	81.2	69.5	0
20180808T145000	2018	08	08	14:50	81.4	69.6	0
20180808T145500	2018	08	08	14:55	81.3	69.4	0
20180808T150000	2018	08	08	15:00	81.2	69.3	0
20180808T150500	2018	08	08	15:05	80.9	69.2	0
20180808T151000	2018	08	08	15:10	81.1	70.1	0
20180808T151500	2018	08	08	15:15	81.1	68.4	0
20180808T152000	2018	08	08	15:20	81.7	68.6	0
20180808T152500	2018	08	08	15:25	81.5	69	0
20180808T153000	2018	08	08	15:30	81.2	70.3	0
20180808T153500	2018	08	08	15:35	81.1	73.1	0
20180808T154000	2018	08	08	15:40	80.6	73.9	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180808T154500	2018	08	08	15:45	80.7	74.7	0
20180808T155000	2018	08	08	15:50	80.5	74.7	0
20180808T155500	2018	08	08	15:55	79.2	75.3	0
20180808T160000	2018	08	08	16:00	78.2	79.1	0
20180808T160500	2018	08	08	16:05	77.9	79.2	0
20180808T161000	2018	08	08	16:10	77.6	79.3	0
20180808T161500	2018	08	08	16:15	78	79.5	0
20180808T162000	2018	08	08	16:20	78.5	77.6	0
20180808T162500	2018	08	08	16:25	79.5	76.3	0
20180808T163000	2018	08	08	16:30	78.5	77.2	0
20180808T163500	2018	08	08	16:35	78.6	79.3	0
20180808T164000	2018	08	08	16:40	78.2	80.1	0
20180808T164500	2018	08	08	16:45	78	81.3	0
20180808T165000	2018	08	08	16:50	78.4	81.4	0
20180808T165500	2018	08	08	16:55	77.9	81.3	0
20180808T170000	2018	08	08	17:00	77.5	82.4	0
20180808T170500	2018	08	08	17:05	77.4	82.7	0
20180808T171000	2018	08	08	17:10	77.4	83	0
20180808T171500	2018	08	08	17:15	77.6	83.7	0
20180808T172000	2018	08	08	17:20	77.8	83.7	0
20180808T172500	2018	08	08	17:25	77.7	83.6	0
20180808T173000	2018	08	08	17:30	77.7	83	0
20180808T173500	2018	08	08	17:35	77.7	82.9	0
20180808T174000	2018	08	08	17:40	77.6	83.2	0
20180808T174500	2018	08	08	17:45	77.4	84	0
20180808T175000	2018	08	08	17:50	76.7	85.6	0
20180808T175500	2018	08	08	17:55	75.7	88.2	0
20180808T180000	2018	08	08	18:00	75.5	90.7	0
20180808T180500	2018	08	08	18:05	75.8	91.4	0
20180808T181000	2018	08	08	18:10	76.2	90.7	0
20180808T181500	2018	08	08	18:15	76.5	90.5	0
20180808T182000	2018	08	08	18:20	77.1	89.9	0
20180808T182500	2018	08	08	18:25	78.1	87.3	0
20180808T183000	2018	08	08	18:30	78.5	82.5	0
20180808T183500	2018	08	08	18:35	78.8	79.2	0
20180808T184000	2018	08	08	18:40	78.7	77.2	0
20180808T184500	2018	08	08	18:45	78.9	77.8	0
20180808T185000	2018	08	08	18:50	78.7	77.5	0
20180808T185500	2018	08	08	18:55	78.5	78.9	0
20180808T190000	2018	08	08	19:00	78.9	79.1	0
20180808T190500	2018	08	08	19:05	78.7	79.7	0
20180808T191000	2018	08	08	19:10	78.8	80.3	0
20180808T191500	2018	08	08	19:15	78.4	80	0
20180808T192000	2018	08	08	19:20	77.9	80.9	0
20180808T192500	2018	08	08	19:25	77.3	81.7	0
20180808T193000	2018	08	08	19:30	77.2	81.5	0
20180808T193500	2018	08	08	19:35	76.8	83.7	0
20180808T194000	2018	08	08	19:40	76.4	85.3	0
20180808T194500	2018	08	08	19:45	75.7	86.6	0
20180808T195000	2018	08	08	19:50	75.5	89.2	0
20180808T195500	2018	08	08	19:55	75.1	89.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180808T200000	2018	08	08	20:00	75.2	89.3	0
20180808T200500	2018	08	08	20:05	74.9	90.3	0
20180808T201000	2018	08	08	20:10	75.5	91	0
20180808T201500	2018	08	08	20:15	75.3	91.4	0
20180808T202000	2018	08	08	20:20	74.8	92.3	0
20180808T202500	2018	08	08	20:25	74.7	93.5	0
20180808T203000	2018	08	08	20:30	74.6	94	0
20180808T203500	2018	08	08	20:35	74.2	94.4	0
20180808T204000	2018	08	08	20:40	73.6	94.8	0
20180808T204500	2018	08	08	20:45	73.1	95.1	0
20180808T205000	2018	08	08	20:50	73.1	95.9	0
20180808T205500	2018	08	08	20:55	72.7	95.8	0
20180808T210000	2018	08	08	21:00	72.9	96.9	0
20180808T210500	2018	08	08	21:05	73	97.4	0
20180808T211000	2018	08	08	21:10	73	97.1	0
20180808T211500	2018	08	08	21:15	73.7	97.2	0
20180808T212000	2018	08	08	21:20	73.5	96.3	0
20180808T212500	2018	08	08	21:25	73.5	95.6	0
20180808T213000	2018	08	08	21:30	73.2	95.4	0
20180808T213500	2018	08	08	21:35	73	95.4	0
20180808T214000	2018	08	08	21:40	72.9	95.8	0
20180808T214500	2018	08	08	21:45	73	95.6	0
20180808T215000	2018	08	08	21:50	73.2	95.2	0
20180808T215500	2018	08	08	21:55	73.3	94.7	0
20180808T220000	2018	08	08	22:00	73.3	94.2	0
20180808T220500	2018	08	08	22:05	73.2	94	0
20180808T221000	2018	08	08	22:10	73.1	94.1	0
20180808T221500	2018	08	08	22:15	73.2	93.7	0
20180808T222000	2018	08	08	22:20	73.1	93.8	0
20180808T222500	2018	08	08	22:25	72.9	94	0
20180808T223000	2018	08	08	22:30	72.9	94.5	0
20180808T223500	2018	08	08	22:35	73	94.7	0
20180808T224000	2018	08	08	22:40	72.9	95.1	0
20180808T224500	2018	08	08	22:45	72.8	95.5	0
20180808T225000	2018	08	08	22:50	72.8	95.9	0
20180808T225500	2018	08	08	22:55	72.6	95.8	0
20180808T230000	2018	08	08	23:00	72.5	96.1	0
20180808T230500	2018	08	08	23:05	72.4	96.4	0
20180808T231000	2018	08	08	23:10	72.3	96.7	0
20180808T231500	2018	08	08	23:15	72.3	96.7	0
20180808T232000	2018	08	08	23:20	72	96.8	0
20180808T232500	2018	08	08	23:25	72.3	96.8	0
20180808T233000	2018	08	08	23:30	72.6	96	0
20180808T233500	2018	08	08	23:35	72.4	95.7	0
20180808T234000	2018	08	08	23:40	72.4	95.7	0
20180808T234500	2018	08	08	23:45	72.3	94.6	0
20180808T235000	2018	08	08	23:50	72.1	94	0
20180808T235500	2018	08	08	23:55	71.9	94	0
20180809T000000	2018	08	09	00:00	71.6	94.8	0
20180809T000500	2018	08	09	00:05	71.5	95.1	0
20180809T001000	2018	08	09	00:10	71.4	95.2	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180809T001500	2018	08	09	00:15	71.5	95.2	0
20180809T002000	2018	08	09	00:20	71.6	94.7	0
20180809T002500	2018	08	09	00:25	71.5	94.6	0
20180809T003000	2018	08	09	00:30	71.3	94.7	0
20180809T003500	2018	08	09	00:35	71.3	95.1	0
20180809T004000	2018	08	09	00:40	71.3	95.1	0
20180809T004500	2018	08	09	00:45	71.4	94.8	0
20180809T005000	2018	08	09	00:50	71.3	94.6	0
20180809T005500	2018	08	09	00:55	71.2	94.7	0
20180809T010000	2018	08	09	01:00	70.9	95.2	0
20180809T010500	2018	08	09	01:05	70.9	95.3	0
20180809T011000	2018	08	09	01:10	70.7	95.2	0
20180809T011500	2018	08	09	01:15	70.6	95.3	0
20180809T012000	2018	08	09	01:20	70.5	95.2	0
20180809T012500	2018	08	09	01:25	70.6	94.8	0
20180809T013000	2018	08	09	01:30	70.4	94.7	0
20180809T013500	2018	08	09	01:35	70.3	94.5	0
20180809T014000	2018	08	09	01:40	70.1	94.4	0
20180809T014500	2018	08	09	01:45	69.8	94.7	0
20180809T015000	2018	08	09	01:50	69.8	95	0
20180809T015500	2018	08	09	01:55	69.9	95.5	0
20180809T020000	2018	08	09	02:00	69.9	95.7	0
20180809T020500	2018	08	09	02:05	70	95.7	0
20180809T021000	2018	08	09	02:10	70	95.3	0
20180809T021500	2018	08	09	02:15	69.9	95.2	0
20180809T022000	2018	08	09	02:20	69.9	95.1	0
20180809T022500	2018	08	09	02:25	69.9	95	0
20180809T023000	2018	08	09	02:30	69.7	95	0
20180809T023500	2018	08	09	02:35	69.5	95.1	0
20180809T024000	2018	08	09	02:40	69.4	95.3	0
20180809T024500	2018	08	09	02:45	69.3	95.4	0
20180809T025000	2018	08	09	02:50	69.3	95.4	0
20180809T025500	2018	08	09	02:55	69.2	95.4	0
20180809T030000	2018	08	09	03:00	69.2	95.4	0
20180809T030500	2018	08	09	03:05	69.1	95.3	0
20180809T031000	2018	08	09	03:10	69.1	95.2	0
20180809T031500	2018	08	09	03:15	69	95.3	0
20180809T032000	2018	08	09	03:20	68.8	95.4	0
20180809T032500	2018	08	09	03:25	68.8	95.5	0
20180809T033000	2018	08	09	03:30	68.7	95.3	0
20180809T033500	2018	08	09	03:35	68.3	95.3	0
20180809T034000	2018	08	09	03:40	68.2	95.9	0
20180809T034500	2018	08	09	03:45	67.9	96.1	0
20180809T035000	2018	08	09	03:50	67.7	96.5	0
20180809T035500	2018	08	09	03:55	67.7	97.3	0
20180809T040000	2018	08	09	04:00	67.8	97.5	0
20180809T040500	2018	08	09	04:05	67.8	97.4	0
20180809T041000	2018	08	09	04:10	67.9	97.4	0
20180809T041500	2018	08	09	04:15	67.6	97.2	0
20180809T042000	2018	08	09	04:20	67.4	97.2	0
20180809T042500	2018	08	09	04:25	67.2	97.4	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180809T043000	2018	08	09	04:30	67.1	97.5	0
20180809T043500	2018	08	09	04:35	66.9	97.7	0
20180809T044000	2018	08	09	04:40	66.3	97.4	0
20180809T044500	2018	08	09	04:45	66.7	98.2	0
20180809T045000	2018	08	09	04:50	66.8	98.3	0
20180809T045500	2018	08	09	04:55	66.7	98.1	0
20180809T050000	2018	08	09	05:00	66.7	98.2	0
20180809T050500	2018	08	09	05:05	66.2	97.7	0
20180809T051000	2018	08	09	05:10	66.5	98.4	0
20180809T051500	2018	08	09	05:15	66.7	98.3	0
20180809T052000	2018	08	09	05:20	67.2	98.3	0
20180809T052500	2018	08	09	05:25	67.5	97.8	0
20180809T053000	2018	08	09	05:30	67.7	97.2	0
20180809T053500	2018	08	09	05:35	67.5	96.8	0
20180809T054000	2018	08	09	05:40	67.3	96.7	0
20180809T054500	2018	08	09	05:45	67.3	96.9	0
20180809T055000	2018	08	09	05:50	67.2	96.8	0
20180809T055500	2018	08	09	05:55	66.8	96.7	0
20180809T060000	2018	08	09	06:00	66.1	96.5	0
20180809T060500	2018	08	09	06:05	66.1	97.3	0
20180809T061000	2018	08	09	06:10	66.4	98.3	0
20180809T061500	2018	08	09	06:15	66.6	98.6	0
20180809T062000	2018	08	09	06:20	66.8	98.6	0
20180809T062500	2018	08	09	06:25	66.8	98.6	0
20180809T063000	2018	08	09	06:30	66.7	98.7	0
20180809T063500	2018	08	09	06:35	66.7	98.8	0
20180809T064000	2018	08	09	06:40	66.8	98.9	0
20180809T064500	2018	08	09	06:45	66.7	98.7	0
20180809T065000	2018	08	09	06:50	67	98.8	0
20180809T065500	2018	08	09	06:55	68.1	98.9	0
20180809T070000	2018	08	09	07:00	68.7	98	0
20180809T070500	2018	08	09	07:05	69.2	96.5	0
20180809T071000	2018	08	09	07:10	69.5	95.4	0
20180809T071500	2018	08	09	07:15	70	94.9	0
20180809T072000	2018	08	09	07:20	70.3	93.6	0
20180809T072500	2018	08	09	07:25	70.6	93.5	0
20180809T073000	2018	08	09	07:30	70.9	91.9	0
20180809T073500	2018	08	09	07:35	70.4	91.8	0
20180809T074000	2018	08	09	07:40	70	93.2	0
20180809T074500	2018	08	09	07:45	69.7	94.1	0
20180809T075000	2018	08	09	07:50	69.6	94.6	0
20180809T075500	2018	08	09	07:55	70.1	94.3	0
20180809T080000	2018	08	09	08:00	70.4	93	0
20180809T080500	2018	08	09	08:05	70.5	92.5	0
20180809T081000	2018	08	09	08:10	71.3	91	0
20180809T081500	2018	08	09	08:15	72	89.8	0
20180809T082000	2018	08	09	08:20	72	88	0
20180809T082500	2018	08	09	08:25	71.9	87.1	0
20180809T083000	2018	08	09	08:30	72.2	87.4	0
20180809T083500	2018	08	09	08:35	72.2	86.4	0
20180809T084000	2018	08	09	08:40	72.3	86.5	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180809T084500	2018	08	09	08:45	72.6	86.8	0
20180809T085000	2018	08	09	08:50	72.6	85.6	0
20180809T085500	2018	08	09	08:55	72.4	85.8	0
20180809T090000	2018	08	09	09:00	72.7	87	0
20180809T090500	2018	08	09	09:05	73.5	84.3	0
20180809T091000	2018	08	09	09:10	73.9	82.8	0
20180809T091500	2018	08	09	09:15	74	82.5	0
20180809T092000	2018	08	09	09:20	74.3	81.5	0
20180809T092500	2018	08	09	09:25	74.8	81.2	0
20180809T093000	2018	08	09	09:30	74.2	80.4	0
20180809T093500	2018	08	09	09:35	74.5	79.7	0
20180809T094000	2018	08	09	09:40	74.7	78.2	0
20180809T094500	2018	08	09	09:45	75.5	78.4	0
20180809T095000	2018	08	09	09:50	75.2	77.7	0
20180809T095500	2018	08	09	09:55	75.3	77.1	0
20180809T100000	2018	08	09	10:00	75.5	77.7	0
20180809T100500	2018	08	09	10:05	74.7	77.8	0
20180809T101000	2018	08	09	10:10	74.5	78.7	0
20180809T101500	2018	08	09	10:15	74.5	80.2	0
20180809T102000	2018	08	09	10:20	74.8	77.1	0
20180809T102500	2018	08	09	10:25	76.2	77.6	0
20180809T103000	2018	08	09	10:30	76.1	76.8	0
20180809T103500	2018	08	09	10:35	75.6	76.4	0
20180809T104000	2018	08	09	10:40	76.1	74.3	0
20180809T104500	2018	08	09	10:45	75.1	75.1	0
20180809T105000	2018	08	09	10:50	75.7	76	0
20180809T105500	2018	08	09	10:55	76.9	75.1	0
20180809T110000	2018	08	09	11:00	77	71	0
20180809T110500	2018	08	09	11:05	76.9	72.3	0
20180809T111000	2018	08	09	11:10	77.3	70.4	0
20180809T111500	2018	08	09	11:15	76.9	70.5	0
20180809T112000	2018	08	09	11:20	77.5	71.6	0
20180809T112500	2018	08	09	11:25	77.5	72.5	0
20180809T113000	2018	08	09	11:30	77.2	71	0
20180809T113500	2018	08	09	11:35	78	69.7	0
20180809T114000	2018	08	09	11:40	78.6	69.1	0
20180809T114500	2018	08	09	11:45	78.8	64.2	0
20180809T115000	2018	08	09	11:50	78.1	63.7	0
20180809T115500	2018	08	09	11:55	77.8	67.2	0
20180809T120000	2018	08	09	12:00	78.1	65.7	0
20180809T120500	2018	08	09	12:05	78.2	64.7	0
20180809T121000	2018	08	09	12:10	78.9	62.7	0
20180809T121500	2018	08	09	12:15	79.3	62.9	0
20180809T122000	2018	08	09	12:20	79.4	63.9	0
20180809T122500	2018	08	09	12:25	78.7	61	0
20180809T123000	2018	08	09	12:30	79.4	61.1	0
20180809T123500	2018	08	09	12:35	77.5	65.4	0
20180809T124000	2018	08	09	12:40	79	67.3	0
20180809T124500	2018	08	09	12:45	79	64.2	0
20180809T125000	2018	08	09	12:50	78.7	64.9	0
20180809T125500	2018	08	09	12:55	78.7	65.3	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180809T130000	2018	08	09	13:00	79.2	63.2	0
20180809T130500	2018	08	09	13:05	78.7	63	0
20180809T131000	2018	08	09	13:10	78.5	62	0
20180809T131500	2018	08	09	13:15	78.2	62.1	0
20180809T132000	2018	08	09	13:20	77.9	62.8	0
20180809T132500	2018	08	09	13:25	78	63.3	0
20180809T133000	2018	08	09	13:30	78	63	0
20180809T133500	2018	08	09	13:35	78.6	63.3	0
20180809T134000	2018	08	09	13:40	78.6	62.4	0
20180809T134500	2018	08	09	13:45	78.3	60.9	0
20180809T135000	2018	08	09	13:50	78.2	61.1	0
20180809T135500	2018	08	09	13:55	78.6	61.5	0
20180809T140000	2018	08	09	14:00	78.6	61	0
20180809T140500	2018	08	09	14:05	77.8	60.9	0
20180809T141000	2018	08	09	14:10	78.8	62.6	0
20180809T141500	2018	08	09	14:15	78.7	60.4	0
20180809T142000	2018	08	09	14:20	78.5	60.8	0
20180809T142500	2018	08	09	14:25	78.8	60.8	0
20180809T143000	2018	08	09	14:30	78.7	60	0
20180809T143500	2018	08	09	14:35	79	60	0
20180809T144000	2018	08	09	14:40	78.8	57.8	0
20180809T144500	2018	08	09	14:45	78.6	57	0
20180809T145000	2018	08	09	14:50	78.6	55.8	0
20180809T145500	2018	08	09	14:55	79.2	55.1	0
20180809T150000	2018	08	09	15:00	78.5	52.9	0
20180809T150500	2018	08	09	15:05	78.9	52.5	0
20180809T151000	2018	08	09	15:10	78.9	51.9	0
20180809T151500	2018	08	09	15:15	78.7	51	0
20180809T152000	2018	08	09	15:20	78.6	50.3	0
20180809T152500	2018	08	09	15:25	78.8	50.3	0
20180809T153000	2018	08	09	15:30	78.9	50.2	0
20180809T153500	2018	08	09	15:35	78.8	50.2	0
20180809T154000	2018	08	09	15:40	78.9	49.9	0
20180809T154500	2018	08	09	15:45	79.5	52.3	0
20180809T155000	2018	08	09	15:50	79.4	51.8	0
20180809T155500	2018	08	09	15:55	79	50.3	0
20180809T160000	2018	08	09	16:00	78.9	52.1	0
20180809T160500	2018	08	09	16:05	79	54.3	0
20180809T161000	2018	08	09	16:10	79.5	58.6	0
20180809T161500	2018	08	09	16:15	79.4	59.2	0
20180809T162000	2018	08	09	16:20	79.1	58.5	0
20180809T162500	2018	08	09	16:25	79	59	0
20180809T163000	2018	08	09	16:30	78.7	59.1	0
20180809T163500	2018	08	09	16:35	77.8	60.5	0
20180809T164000	2018	08	09	16:40	78.6	61.4	0
20180809T164500	2018	08	09	16:45	78.4	60	0
20180809T165000	2018	08	09	16:50	78.4	60.7	0
20180809T165500	2018	08	09	16:55	78.4	61.3	0
20180809T170000	2018	08	09	17:00	78.4	60.9	0
20180809T170500	2018	08	09	17:05	78	59.4	0
20180809T171000	2018	08	09	17:10	77.9	59.9	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180809T171500	2018	08	09	17:15	77.8	59.3	0
20180809T172000	2018	08	09	17:20	77.7	59.7	0
20180809T172500	2018	08	09	17:25	77.4	58.9	0
20180809T173000	2018	08	09	17:30	77.4	60.2	0
20180809T173500	2018	08	09	17:35	77.4	60.1	0
20180809T174000	2018	08	09	17:40	77.3	60	0
20180809T174500	2018	08	09	17:45	77.4	60.9	0
20180809T175000	2018	08	09	17:50	77.3	60.2	0
20180809T175500	2018	08	09	17:55	76.9	60.9	0
20180809T180000	2018	08	09	18:00	76.6	61.1	0
20180809T180500	2018	08	09	18:05	76.6	60.9	0
20180809T181000	2018	08	09	18:10	76.8	60.8	0
20180809T181500	2018	08	09	18:15	76.5	61.2	0
20180809T182000	2018	08	09	18:20	76.3	62.6	0
20180809T182500	2018	08	09	18:25	76.2	61.4	0
20180809T183000	2018	08	09	18:30	75.9	62.5	0
20180809T183500	2018	08	09	18:35	76	62.4	0
20180809T184000	2018	08	09	18:40	75.4	63.2	0
20180809T184500	2018	08	09	18:45	74.9	64.4	0
20180809T185000	2018	08	09	18:50	74.8	64.6	0
20180809T185500	2018	08	09	18:55	75	63.6	0
20180809T190000	2018	08	09	19:00	75	63.2	0
20180809T190500	2018	08	09	19:05	75.3	61.6	0
20180809T191000	2018	08	09	19:10	75.4	60.1	0
20180809T191500	2018	08	09	19:15	75.2	60.3	0
20180809T192000	2018	08	09	19:20	74.8	61.1	0
20180809T192500	2018	08	09	19:25	74.6	61.8	0
20180809T193000	2018	08	09	19:30	74.2	62.7	0
20180809T193500	2018	08	09	19:35	73.9	63.4	0
20180809T194000	2018	08	09	19:40	73.5	64.4	0
20180809T194500	2018	08	09	19:45	73	66.2	0
20180809T195000	2018	08	09	19:50	72.8	67.1	0
20180809T195500	2018	08	09	19:55	72.6	67.8	0
20180809T200000	2018	08	09	20:00	72.2	68.7	0
20180809T200500	2018	08	09	20:05	72.2	69.1	0
20180809T201000	2018	08	09	20:10	71.9	69.7	0
20180809T201500	2018	08	09	20:15	71.5	70.7	0
20180809T202000	2018	08	09	20:20	71.1	71.3	0
20180809T202500	2018	08	09	20:25	71.3	71.5	0
20180809T203000	2018	08	09	20:30	71.4	71	0
20180809T203500	2018	08	09	20:35	71.1	71.2	0
20180809T204000	2018	08	09	20:40	70.8	72.1	0
20180809T204500	2018	08	09	20:45	69.9	73.9	0
20180809T205000	2018	08	09	20:50	68.8	76.2	0
20180809T205500	2018	08	09	20:55	68.6	77	0
20180809T210000	2018	08	09	21:00	68.3	77.1	0
20180809T210500	2018	08	09	21:05	68.5	76.7	0
20180809T211000	2018	08	09	21:10	68.9	75.9	0
20180809T211500	2018	08	09	21:15	69.2	74.9	0
20180809T212000	2018	08	09	21:20	68.7	75.3	0
20180809T212500	2018	08	09	21:25	69.2	74.7	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180809T213000	2018	08	09	21:30	69.3	74.2	0
20180809T213500	2018	08	09	21:35	69.3	74.2	0
20180809T214000	2018	08	09	21:40	69.6	73.8	0
20180809T214500	2018	08	09	21:45	69.3	74.4	0
20180809T215000	2018	08	09	21:50	69	75.9	0
20180809T215500	2018	08	09	21:55	68.8	76.6	0
20180809T220000	2018	08	09	22:00	68.9	77	0
20180809T220500	2018	08	09	22:05	68.6	77.7	0
20180809T221000	2018	08	09	22:10	68.5	78.5	0
20180809T221500	2018	08	09	22:15	68	79.6	0
20180809T222000	2018	08	09	22:20	67.9	80.4	0
20180809T222500	2018	08	09	22:25	67.8	80.6	0
20180809T223000	2018	08	09	22:30	67	81.1	0
20180809T223500	2018	08	09	22:35	66.9	81.9	0
20180809T224000	2018	08	09	22:40	67.8	80.2	0
20180809T224500	2018	08	09	22:45	67.8	79.5	0
20180809T225000	2018	08	09	22:50	67.2	79.7	0
20180809T225500	2018	08	09	22:55	66.7	81.6	0
20180809T230000	2018	08	09	23:00	66.5	82.6	0
20180809T230500	2018	08	09	23:05	66.2	83.4	0
20180809T231000	2018	08	09	23:10	63.9	83.7	0
20180809T231500	2018	08	09	23:15	63.7	86.6	0
20180809T232000	2018	08	09	23:20	63.5	89.3	0
20180809T232500	2018	08	09	23:25	62.8	91.6	0
20180809T233000	2018	08	09	23:30	61.9	92.5	0
20180809T233500	2018	08	09	23:35	62.3	92.8	0
20180809T234000	2018	08	09	23:40	63.3	92.8	0
20180809T234500	2018	08	09	23:45	63.4	90.6	0
20180809T235000	2018	08	09	23:50	62.7	90.9	0
20180809T235500	2018	08	09	23:55	63.3	92	0
20180810T000000	2018	08	10	00:00	62.9	89	0
20180810T000500	2018	08	10	00:05	61.4	90.4	0
20180810T001000	2018	08	10	00:10	61.1	93.8	0
20180810T001500	2018	08	10	00:15	61.6	95.4	0
20180810T002000	2018	08	10	00:20	60.9	94.1	0
20180810T002500	2018	08	10	00:25	60.2	94.8	0
20180810T003000	2018	08	10	00:30	60	96	0
20180810T003500	2018	08	10	00:35	60.1	97.2	0
20180810T004000	2018	08	10	00:40	59.9	97.3	0
20180810T004500	2018	08	10	00:45	59.7	97.1	0
20180810T005000	2018	08	10	00:50	59.7	97.6	0
20180810T005500	2018	08	10	00:55	60	98.5	0
20180810T010000	2018	08	10	01:00	60.5	98.8	0
20180810T010500	2018	08	10	01:05	61.3	98.9	0
20180810T011000	2018	08	10	01:10	61.9	97.7	0
20180810T011500	2018	08	10	01:15	60.7	96	0
20180810T012000	2018	08	10	01:20	60.2	96.3	0
20180810T012500	2018	08	10	01:25	60.9	97.1	0
20180810T013000	2018	08	10	01:30	62.7	96.3	0
20180810T013500	2018	08	10	01:35	62.6	92.1	0
20180810T014000	2018	08	10	01:40	61.8	92.3	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180810T014500	2018	08	10	01:45	61.2	93.6	0
20180810T015000	2018	08	10	01:50	60.7	94.4	0
20180810T015500	2018	08	10	01:55	60.7	94.5	0
20180810T020000	2018	08	10	02:00	60.5	95	0
20180810T020500	2018	08	10	02:05	60.4	96.3	0
20180810T021000	2018	08	10	02:10	59.6	96.2	0
20180810T021500	2018	08	10	02:15	60.2	98	0
20180810T022000	2018	08	10	02:20	60.2	98.3	0
20180810T022500	2018	08	10	02:25	61	98.3	0
20180810T023000	2018	08	10	02:30	61.4	95.7	0
20180810T023500	2018	08	10	02:35	62.2	94.6	0
20180810T024000	2018	08	10	02:40	62.9	92	0
20180810T024500	2018	08	10	02:45	63.3	91.1	0
20180810T025000	2018	08	10	02:50	62.8	90.8	0
20180810T025500	2018	08	10	02:55	62.8	91.9	0
20180810T030000	2018	08	10	03:00	61.9	94.2	0
20180810T030500	2018	08	10	03:05	62.1	95.5	0
20180810T031000	2018	08	10	03:10	62.2	95.1	0
20180810T031500	2018	08	10	03:15	62.2	95.6	0.01
20180810T032000	2018	08	10	03:20	62.4	96.9	0
20180810T032500	2018	08	10	03:25	63.1	96.7	0
20180810T033000	2018	08	10	03:30	63.1	96	0
20180810T033500	2018	08	10	03:35	62.7	96	0
20180810T034000	2018	08	10	03:40	62.5	96	0
20180810T034500	2018	08	10	03:45	62.5	96.5	0
20180810T035000	2018	08	10	03:50	62.8	96.3	0
20180810T035500	2018	08	10	03:55	62.9	94.7	0
20180810T040000	2018	08	10	04:00	62.8	94.9	0
20180810T040500	2018	08	10	04:05	62.4	95	0
20180810T041000	2018	08	10	04:10	62.2	95.6	0
20180810T041500	2018	08	10	04:15	62.1	95.7	0
20180810T042000	2018	08	10	04:20	62.1	95.8	0
20180810T042500	2018	08	10	04:25	62	95.6	0
20180810T043000	2018	08	10	04:30	62.1	95.9	0
20180810T043500	2018	08	10	04:35	62.7	96	0
20180810T044000	2018	08	10	04:40	62.8	95.5	0
20180810T044500	2018	08	10	04:45	63	95.6	0
20180810T045000	2018	08	10	04:50	63.2	95.5	0
20180810T045500	2018	08	10	04:55	63.2	95.4	0
20180810T050000	2018	08	10	05:00	63	95.4	0
20180810T050500	2018	08	10	05:05	62.9	95.7	0
20180810T051000	2018	08	10	05:10	62.7	95.9	0
20180810T051500	2018	08	10	05:15	62.8	95.9	0
20180810T052000	2018	08	10	05:20	62.6	96.1	0
20180810T052500	2018	08	10	05:25	62.6	96.2	0
20180810T053000	2018	08	10	05:30	62.3	96	0
20180810T053500	2018	08	10	05:35	62.3	96.2	0
20180810T054000	2018	08	10	05:40	62.4	95.9	0
20180810T054500	2018	08	10	05:45	62.6	95.6	0
20180810T055000	2018	08	10	05:50	62.5	95.4	0
20180810T055500	2018	08	10	05:55	63	94.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180810T060000	2018	08	10	06:00	62.4	94	0
20180810T060500	2018	08	10	06:05	62	95	0
20180810T061000	2018	08	10	06:10	62.4	95.4	0
20180810T061500	2018	08	10	06:15	62.2	95.3	0
20180810T062000	2018	08	10	06:20	62.3	95.5	0
20180810T062500	2018	08	10	06:25	61.7	94.9	0
20180810T063000	2018	08	10	06:30	61.8	96.4	0
20180810T063500	2018	08	10	06:35	62.2	96.2	0
20180810T064000	2018	08	10	06:40	62.5	95.8	0
20180810T064500	2018	08	10	06:45	62.9	95	0
20180810T065000	2018	08	10	06:50	63.1	94.4	0
20180810T065500	2018	08	10	06:55	63.5	94.3	0
20180810T070000	2018	08	10	07:00	63.9	94	0
20180810T070500	2018	08	10	07:05	64.2	93.8	0
20180810T071000	2018	08	10	07:10	64.4	93.8	0
20180810T071500	2018	08	10	07:15	64.5	93.4	0
20180810T072000	2018	08	10	07:20	64.7	93.5	0
20180810T072500	2018	08	10	07:25	64.9	93.5	0
20180810T073000	2018	08	10	07:30	65.7	93.4	0
20180810T073500	2018	08	10	07:35	65.7	92.2	0
20180810T074000	2018	08	10	07:40	65.6	92.7	0
20180810T074500	2018	08	10	07:45	65.7	91.9	0
20180810T075000	2018	08	10	07:50	65.9	92	0
20180810T075500	2018	08	10	07:55	66	92.3	0
20180810T080000	2018	08	10	08:00	66	92.4	0
20180810T080500	2018	08	10	08:05	66.1	92	0
20180810T081000	2018	08	10	08:10	66.3	92.2	0
20180810T081500	2018	08	10	08:15	66.2	92.5	0
20180810T082000	2018	08	10	08:20	66.5	91.9	0
20180810T082500	2018	08	10	08:25	67.1	90.7	0
20180810T083000	2018	08	10	08:30	67.3	88.8	0
20180810T083500	2018	08	10	08:35	67.9	87.5	0
20180810T084000	2018	08	10	08:40	68.2	86.5	0
20180810T084500	2018	08	10	08:45	68.6	86.3	0
20180810T085000	2018	08	10	08:50	68.6	86.3	0
20180810T085500	2018	08	10	08:55	69.1	86.7	0
20180810T090000	2018	08	10	09:00	68.6	85.7	0
20180810T090500	2018	08	10	09:05	68.8	85.8	0
20180810T091000	2018	08	10	09:10	69.2	85.9	0
20180810T091500	2018	08	10	09:15	70.5	85	0
20180810T092000	2018	08	10	09:20	70.4	82.9	0
20180810T092500	2018	08	10	09:25	70.4	81.3	0
20180810T093000	2018	08	10	09:30	70.8	81.7	0
20180810T093500	2018	08	10	09:35	71.7	82.5	0
20180810T094000	2018	08	10	09:40	71.3	82.1	0
20180810T094500	2018	08	10	09:45	71.4	82	0
20180810T095000	2018	08	10	09:50	71.5	82.2	0
20180810T095500	2018	08	10	09:55	71.6	81.7	0
20180810T100000	2018	08	10	10:00	71.7	81.2	0
20180810T100500	2018	08	10	10:05	71.5	80.7	0
20180810T101000	2018	08	10	10:10	72.4	81.2	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180810T101500	2018	08	10	10:15	72.3	79.7	0
20180810T102000	2018	08	10	10:20	72.3	79.4	0
20180810T102500	2018	08	10	10:25	72.4	78.2	0
20180810T103000	2018	08	10	10:30	72.6	77.3	0
20180810T103500	2018	08	10	10:35	72.6	77.9	0
20180810T104000	2018	08	10	10:40	72.4	78.4	0
20180810T104500	2018	08	10	10:45	72.4	78.6	0
20180810T105000	2018	08	10	10:50	72.5	79.5	0
20180810T105500	2018	08	10	10:55	73	79.7	0
20180810T110000	2018	08	10	11:00	72.5	79	0
20180810T110500	2018	08	10	11:05	72.3	79.2	0
20180810T111000	2018	08	10	11:10	72	78.3	0
20180810T111500	2018	08	10	11:15	71.8	79.6	0
20180810T112000	2018	08	10	11:20	71.9	80.9	0
20180810T112500	2018	08	10	11:25	71.5	80.1	0
20180810T113000	2018	08	10	11:30	71.6	81.3	0
20180810T113500	2018	08	10	11:35	72	81.3	0
20180810T114000	2018	08	10	11:40	72	80.9	0
20180810T114500	2018	08	10	11:45	71.6	83.6	0
20180810T115000	2018	08	10	11:50	72.5	83.9	0
20180810T115500	2018	08	10	11:55	73.8	81.2	0
20180810T120000	2018	08	10	12:00	73.7	79	0
20180810T120500	2018	08	10	12:05	73.7	76.5	0
20180810T121000	2018	08	10	12:10	74.3	75.6	0
20180810T121500	2018	08	10	12:15	74.1	74.7	0
20180810T122000	2018	08	10	12:20	74	76.5	0
20180810T122500	2018	08	10	12:25	74	77.6	0
20180810T123000	2018	08	10	12:30	72.9	78.4	0
20180810T123500	2018	08	10	12:35	72.9	79.1	0
20180810T124000	2018	08	10	12:40	72.9	79.2	0
20180810T124500	2018	08	10	12:45	73.1	79.6	0
20180810T125000	2018	08	10	12:50	72.9	80.3	0
20180810T125500	2018	08	10	12:55	72.8	79.5	0
20180810T130000	2018	08	10	13:00	73.1	79.6	0
20180810T130500	2018	08	10	13:05	73.4	78.9	0
20180810T131000	2018	08	10	13:10	73.2	78.6	0
20180810T131500	2018	08	10	13:15	73.8	78.8	0
20180810T132000	2018	08	10	13:20	74.1	78.8	0
20180810T132500	2018	08	10	13:25	74.6	77.3	0
20180810T133000	2018	08	10	13:30	75.7	77.2	0
20180810T133500	2018	08	10	13:35	75	75.8	0
20180810T134000	2018	08	10	13:40	74.3	77.2	0
20180810T134500	2018	08	10	13:45	73.8	78.2	0
20180810T135000	2018	08	10	13:50	73.6	78.1	0
20180810T135500	2018	08	10	13:55	73.6	78.9	0
20180810T140000	2018	08	10	14:00	73.7	78.7	0
20180810T140500	2018	08	10	14:05	73.5	78.3	0
20180810T141000	2018	08	10	14:10	73.8	78.3	0
20180810T141500	2018	08	10	14:15	73.7	79.3	0
20180810T142000	2018	08	10	14:20	74	78.7	0
20180810T142500	2018	08	10	14:25	73.9	77.2	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180810T143000	2018	08	10	14:30	73.8	77.8	0
20180810T143500	2018	08	10	14:35	74	79.1	0
20180810T144000	2018	08	10	14:40	74.3	76.8	0
20180810T144500	2018	08	10	14:45	74.8	77.3	0
20180810T145000	2018	08	10	14:50	76.2	75.9	0
20180810T145500	2018	08	10	14:55	76.2	75.1	0
20180810T150000	2018	08	10	15:00	76.4	73.3	0
20180810T150500	2018	08	10	15:05	75.9	74	0
20180810T151000	2018	08	10	15:10	76.2	74.3	0
20180810T151500	2018	08	10	15:15	76.5	73.8	0
20180810T152000	2018	08	10	15:20	76.1	74	0
20180810T152500	2018	08	10	15:25	77.1	73.4	0
20180810T153000	2018	08	10	15:30	78.1	72.1	0
20180810T153500	2018	08	10	15:35	77.5	71.2	0
20180810T154000	2018	08	10	15:40	77.6	71.5	0
20180810T154500	2018	08	10	15:45	77.7	70.9	0
20180810T155000	2018	08	10	15:50	77.5	70.2	0
20180810T155500	2018	08	10	15:55	78.5	70.6	0
20180810T160000	2018	08	10	16:00	78.1	70.3	0
20180810T160500	2018	08	10	16:05	77.8	71	0
20180810T161000	2018	08	10	16:10	77.6	70.2	0
20180810T161500	2018	08	10	16:15	78.1	69.8	0
20180810T162000	2018	08	10	16:20	78.5	70.9	0
20180810T162500	2018	08	10	16:25	78.2	69.3	0
20180810T163000	2018	08	10	16:30	78.1	70.8	0
20180810T163500	2018	08	10	16:35	78.1	70.1	0
20180810T164000	2018	08	10	16:40	78.4	69.8	0
20180810T164500	2018	08	10	16:45	78.1	69.8	0
20180810T165000	2018	08	10	16:50	78.2	70.7	0
20180810T165500	2018	08	10	16:55	78.3	68.2	0
20180810T170000	2018	08	10	17:00	78	67.5	0
20180810T170500	2018	08	10	17:05	78.1	67.3	0
20180810T171000	2018	08	10	17:10	78.5	68.2	0
20180810T171500	2018	08	10	17:15	78.1	68.5	0
20180810T172000	2018	08	10	17:20	78.1	68.8	0
20180810T172500	2018	08	10	17:25	78.2	68.8	0
20180810T173000	2018	08	10	17:30	78.3	68.4	0
20180810T173500	2018	08	10	17:35	78.3	68.2	0
20180810T174000	2018	08	10	17:40	78.2	68	0
20180810T174500	2018	08	10	17:45	77.9	67.6	0
20180810T175000	2018	08	10	17:50	77.8	67.9	0
20180810T175500	2018	08	10	17:55	77.9	68.2	0
20180810T180000	2018	08	10	18:00	77.7	68.3	0
20180810T180500	2018	08	10	18:05	77.6	67.8	0
20180810T181000	2018	08	10	18:10	77.5	68.2	0
20180810T181500	2018	08	10	18:15	77.4	68	0
20180810T182000	2018	08	10	18:20	77.3	69.3	0
20180810T182500	2018	08	10	18:25	77.1	68.1	0
20180810T183000	2018	08	10	18:30	77.1	68.5	0
20180810T183500	2018	08	10	18:35	76.8	68.6	0
20180810T184000	2018	08	10	18:40	76.5	69.2	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180810T184500	2018	08	10	18:45	76.3	69.7	0
20180810T185000	2018	08	10	18:50	76.1	69.3	0
20180810T185500	2018	08	10	18:55	76	68.5	0
20180810T190000	2018	08	10	19:00	75.7	68.7	0
20180810T190500	2018	08	10	19:05	75.2	70.5	0
20180810T191000	2018	08	10	19:10	74.6	70.9	0
20180810T191500	2018	08	10	19:15	74.1	71.7	0
20180810T192000	2018	08	10	19:20	73.5	73.1	0
20180810T192500	2018	08	10	19:25	73.2	74.4	0
20180810T193000	2018	08	10	19:30	72.5	75.3	0
20180810T193500	2018	08	10	19:35	71.9	76.2	0
20180810T194000	2018	08	10	19:40	71.8	75.6	0
20180810T194500	2018	08	10	19:45	71.5	74.6	0
20180810T195000	2018	08	10	19:50	71.1	74	0
20180810T195500	2018	08	10	19:55	70.4	75.4	0
20180810T200000	2018	08	10	20:00	70	75.7	0
20180810T200500	2018	08	10	20:05	69.6	75.7	0
20180810T201000	2018	08	10	20:10	69.4	76	0
20180810T201500	2018	08	10	20:15	69.1	77.4	0
20180810T202000	2018	08	10	20:20	68.5	78.4	0
20180810T202500	2018	08	10	20:25	68.4	78.1	0
20180810T203000	2018	08	10	20:30	68.2	78.9	0
20180810T203500	2018	08	10	20:35	68.1	78.5	0
20180810T204000	2018	08	10	20:40	67.8	78.8	0
20180810T204500	2018	08	10	20:45	68	77.8	0
20180810T205000	2018	08	10	20:50	67.6	78.1	0
20180810T205500	2018	08	10	20:55	67.7	77.4	0
20180810T210000	2018	08	10	21:00	67.7	76.4	0
20180810T210500	2018	08	10	21:05	65.5	79.5	0
20180810T211000	2018	08	10	21:10	64.1	85.7	0
20180810T211500	2018	08	10	21:15	63.4	90.4	0
20180810T212000	2018	08	10	21:20	63.1	93.1	0
20180810T212500	2018	08	10	21:25	62.6	93.4	0
20180810T213000	2018	08	10	21:30	62.6	93.1	0
20180810T213500	2018	08	10	21:35	62.3	92.4	0
20180810T214000	2018	08	10	21:40	61.6	92.8	0
20180810T214500	2018	08	10	21:45	61.8	94.4	0
20180810T215000	2018	08	10	21:50	61.5	94.4	0
20180810T215500	2018	08	10	21:55	61.8	94.6	0
20180810T220000	2018	08	10	22:00	61.2	94.7	0
20180810T220500	2018	08	10	22:05	60.8	94.5	0
20180810T221000	2018	08	10	22:10	60.7	94.7	0
20180810T221500	2018	08	10	22:15	60.5	95.8	0
20180810T222000	2018	08	10	22:20	60.5	96.2	0
20180810T222500	2018	08	10	22:25	60.4	96.5	0
20180810T223000	2018	08	10	22:30	60.4	96.8	0
20180810T223500	2018	08	10	22:35	60.3	96.4	0
20180810T224000	2018	08	10	22:40	61.2	96.7	0
20180810T224500	2018	08	10	22:45	61.3	95.1	0
20180810T225000	2018	08	10	22:50	60.9	94.8	0
20180810T225500	2018	08	10	22:55	61.6	92.7	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180810T230000	2018	08	10	23:00	60.9	87.8	0
20180810T230500	2018	08	10	23:05	61.3	91.2	0
20180810T231000	2018	08	10	23:10	60.5	94.1	0
20180810T231500	2018	08	10	23:15	59.9	94.5	0
20180810T232000	2018	08	10	23:20	59.5	93.9	0
20180810T232500	2018	08	10	23:25	59.1	94	0
20180810T233000	2018	08	10	23:30	58.8	94.2	0
20180810T233500	2018	08	10	23:35	59	94.5	0
20180810T234000	2018	08	10	23:40	59.9	95.5	0
20180810T234500	2018	08	10	23:45	58.8	94.6	0
20180810T235000	2018	08	10	23:50	59	95.4	0
20180810T235500	2018	08	10	23:55	58.8	93.9	0
20180811T000000	2018	08	11	00:00	58.3	95.8	0
20180811T000500	2018	08	11	00:05	58.5	96.8	0
20180811T001000	2018	08	11	00:10	58.6	95.6	0
20180811T001500	2018	08	11	00:15	58.9	95.9	0
20180811T002000	2018	08	11	00:20	58.7	95.3	0
20180811T002500	2018	08	11	00:25	59	95.8	0
20180811T003000	2018	08	11	00:30	59.1	94.9	0
20180811T003500	2018	08	11	00:35	58.3	95.2	0
20180811T004000	2018	08	11	00:40	58.2	95.8	0
20180811T004500	2018	08	11	00:45	58.3	96.7	0
20180811T005000	2018	08	11	00:50	58.3	96.4	0
20180811T005500	2018	08	11	00:55	58.2	96.3	0
20180811T010000	2018	08	11	01:00	58.3	96.7	0
20180811T010500	2018	08	11	01:05	58.2	96.8	0
20180811T011000	2018	08	11	01:10	58.5	97.2	0
20180811T011500	2018	08	11	01:15	58.9	97.5	0
20180811T012000	2018	08	11	01:20	58.8	97.4	0
20180811T012500	2018	08	11	01:25	58.9	97.5	0
20180811T013000	2018	08	11	01:30	59	97.3	0
20180811T013500	2018	08	11	01:35	59.2	96.9	0
20180811T014000	2018	08	11	01:40	59	96.5	0
20180811T014500	2018	08	11	01:45	59	96.9	0
20180811T015000	2018	08	11	01:50	59.5	97.3	0
20180811T015500	2018	08	11	01:55	59.2	96.8	0
20180811T020000	2018	08	11	02:00	59.6	97.4	0
20180811T020500	2018	08	11	02:05	59.8	96.6	0
20180811T021000	2018	08	11	02:10	59.8	96.4	0
20180811T021500	2018	08	11	02:15	59.3	95.9	0
20180811T022000	2018	08	11	02:20	59.2	96.5	0
20180811T022500	2018	08	11	02:25	59.3	96.1	0
20180811T023000	2018	08	11	02:30	59.1	97	0
20180811T023500	2018	08	11	02:35	58.9	97.2	0
20180811T024000	2018	08	11	02:40	58.7	97.2	0
20180811T024500	2018	08	11	02:45	59.3	97.4	0
20180811T025000	2018	08	11	02:50	59.7	96.8	0
20180811T025500	2018	08	11	02:55	59.8	96	0
20180811T030000	2018	08	11	03:00	60	96.4	0
20180811T030500	2018	08	11	03:05	60.5	97.2	0
20180811T031000	2018	08	11	03:10	60.5	96.9	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180811T031500	2018	08	11	03:15	60.6	96.5	0
20180811T032000	2018	08	11	03:20	60.6	94.9	0
20180811T032500	2018	08	11	03:25	60.7	94.8	0
20180811T033000	2018	08	11	03:30	61.2	94.4	0
20180811T033500	2018	08	11	03:35	61	92.5	0
20180811T034000	2018	08	11	03:40	60	93.6	0
20180811T034500	2018	08	11	03:45	59.8	94.8	0
20180811T035000	2018	08	11	03:50	59.6	94.9	0
20180811T035500	2018	08	11	03:55	59.6	94.8	0
20180811T040000	2018	08	11	04:00	59.7	94.5	0
20180811T040500	2018	08	11	04:05	60.1	94.1	0
20180811T041000	2018	08	11	04:10	59.7	93.7	0
20180811T041500	2018	08	11	04:15	59.6	93.1	0
20180811T042000	2018	08	11	04:20	58.8	93.8	0
20180811T042500	2018	08	11	04:25	58.1	95.5	0
20180811T043000	2018	08	11	04:30	58	96.9	0
20180811T043500	2018	08	11	04:35	58	96.9	0
20180811T044000	2018	08	11	04:40	57.6	96.8	0
20180811T044500	2018	08	11	04:45	57.3	97.4	0
20180811T045000	2018	08	11	04:50	57.3	97.7	0
20180811T045500	2018	08	11	04:55	56.8	97.7	0
20180811T050000	2018	08	11	05:00	56.6	97.3	0
20180811T050500	2018	08	11	05:05	57	98.5	0
20180811T051000	2018	08	11	05:10	56.7	98.5	0
20180811T051500	2018	08	11	05:15	56.7	98.7	0
20180811T052000	2018	08	11	05:20	56.7	97.9	0
20180811T052500	2018	08	11	05:25	56.7	97.3	0
20180811T053000	2018	08	11	05:30	57	98.5	0
20180811T053500	2018	08	11	05:35	56.9	98.4	0
20180811T054000	2018	08	11	05:40	56.9	98.4	0
20180811T054500	2018	08	11	05:45	57.3	98.8	0
20180811T055000	2018	08	11	05:50	57.1	98.4	0
20180811T055500	2018	08	11	05:55	57.4	98.8	0
20180811T060000	2018	08	11	06:00	57.4	98.8	0
20180811T060500	2018	08	11	06:05	57.3	98.7	0
20180811T061000	2018	08	11	06:10	57.6	98.9	0
20180811T061500	2018	08	11	06:15	58.7	99.1	0
20180811T062000	2018	08	11	06:20	59.1	98.2	0
20180811T062500	2018	08	11	06:25	59.6	96.6	0
20180811T063000	2018	08	11	06:30	59.4	96.2	0
20180811T063500	2018	08	11	06:35	59.5	95.3	0
20180811T064000	2018	08	11	06:40	59.4	94.3	0
20180811T064500	2018	08	11	06:45	59.2	94.8	0
20180811T065000	2018	08	11	06:50	59.7	94.7	0
20180811T065500	2018	08	11	06:55	59.9	94	0
20180811T070000	2018	08	11	07:00	60	93.1	0
20180811T070500	2018	08	11	07:05	60	93.7	0
20180811T071000	2018	08	11	07:10	60.5	93.8	0
20180811T071500	2018	08	11	07:15	61.2	92.2	0
20180811T072000	2018	08	11	07:20	62.2	90.2	0
20180811T072500	2018	08	11	07:25	63.1	88	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180811T073000	2018	08	11	07:30	63.4	85.9	0
20180811T073500	2018	08	11	07:35	63.5	86.7	0
20180811T074000	2018	08	11	07:40	63.8	87.4	0
20180811T074500	2018	08	11	07:45	64.7	83.8	0
20180811T075000	2018	08	11	07:50	65.5	84.3	0
20180811T075500	2018	08	11	07:55	65.9	80	0
20180811T080000	2018	08	11	08:00	66.1	79.3	0
20180811T080500	2018	08	11	08:05	66.3	80	0
20180811T081000	2018	08	11	08:10	66.4	79.4	0
20180811T081500	2018	08	11	08:15	66.4	78	0
20180811T082000	2018	08	11	08:20	66.5	78.2	0
20180811T082500	2018	08	11	08:25	66.5	77.4	0
20180811T083000	2018	08	11	08:30	66.5	76.4	0
20180811T083500	2018	08	11	08:35	66.5	77.1	0
20180811T084000	2018	08	11	08:40	66.3	81.3	0
20180811T084500	2018	08	11	08:45	66.3	84	0
20180811T085000	2018	08	11	08:50	66.1	85.3	0
20180811T085500	2018	08	11	08:55	66.3	86.9	0
20180811T090000	2018	08	11	09:00	66.5	86.3	0
20180811T090500	2018	08	11	09:05	66.7	83.7	0
20180811T091000	2018	08	11	09:10	66.8	82.2	0
20180811T091500	2018	08	11	09:15	67.1	81.3	0
20180811T092000	2018	08	11	09:20	67.5	80.1	0
20180811T092500	2018	08	11	09:25	67.6	80	0
20180811T093000	2018	08	11	09:30	67.3	80.2	0
20180811T093500	2018	08	11	09:35	67.4	80.3	0
20180811T094000	2018	08	11	09:40	67.4	79.7	0
20180811T094500	2018	08	11	09:45	67.2	79.6	0
20180811T095000	2018	08	11	09:50	67.5	78.5	0
20180811T095500	2018	08	11	09:55	67.7	80.1	0
20180811T100000	2018	08	11	10:00	67.9	81.6	0
20180811T100500	2018	08	11	10:05	67.5	81.1	0
20180811T101000	2018	08	11	10:10	67.3	81.1	0
20180811T101500	2018	08	11	10:15	67.3	79.4	0
20180811T102000	2018	08	11	10:20	67.4	77.9	0
20180811T102500	2018	08	11	10:25	68.1	77.1	0
20180811T103000	2018	08	11	10:30	68.2	75.2	0
20180811T103500	2018	08	11	10:35	68.1	75.8	0
20180811T104000	2018	08	11	10:40	68	75.3	0
20180811T104500	2018	08	11	10:45	68	75.3	0
20180811T105000	2018	08	11	10:50	67.9	76.1	0
20180811T105500	2018	08	11	10:55	67.9	76.1	0
20180811T110000	2018	08	11	11:00	67.9	75.9	0
20180811T110500	2018	08	11	11:05	68	76.1	0
20180811T111000	2018	08	11	11:10	68	75.2	0
20180811T111500	2018	08	11	11:15	67.9	76.7	0
20180811T112000	2018	08	11	11:20	67.6	76.4	0
20180811T112500	2018	08	11	11:25	67.2	78.6	0
20180811T113000	2018	08	11	11:30	67.1	81.1	0
20180811T113500	2018	08	11	11:35	67	81	0
20180811T114000	2018	08	11	11:40	66.9	81.5	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180811T114500	2018	08	11	11:45	67.1	82.6	0
20180811T115000	2018	08	11	11:50	67.3	83.1	0
20180811T115500	2018	08	11	11:55	67.5	81.1	0
20180811T120000	2018	08	11	12:00	67.4	80.4	0
20180811T120500	2018	08	11	12:05	67.4	82.4	0
20180811T121000	2018	08	11	12:10	67.3	82.2	0
20180811T121500	2018	08	11	12:15	67.1	83.1	0
20180811T122000	2018	08	11	12:20	67.1	83.6	0
20180811T122500	2018	08	11	12:25	67.2	85.3	0
20180811T123000	2018	08	11	12:30	67.3	83.5	0
20180811T123500	2018	08	11	12:35	67.3	82.7	0
20180811T124000	2018	08	11	12:40	67.1	82.8	0
20180811T124500	2018	08	11	12:45	67.2	82.7	0
20180811T125000	2018	08	11	12:50	67.1	83.8	0
20180811T125500	2018	08	11	12:55	67.2	85	0
20180811T130000	2018	08	11	13:00	67.2	85.6	0
20180811T130500	2018	08	11	13:05	67.3	83.6	0
20180811T131000	2018	08	11	13:10	67.5	85.7	0
20180811T131500	2018	08	11	13:15	67.4	84.3	0
20180811T132000	2018	08	11	13:20	67.6	84.4	0
20180811T132500	2018	08	11	13:25	67.4	85	0
20180811T133000	2018	08	11	13:30	67.2	83.7	0
20180811T133500	2018	08	11	13:35	67.3	85.6	0
20180811T134000	2018	08	11	13:40	67.2	85.8	0
20180811T134500	2018	08	11	13:45	67.2	85.8	0
20180811T135000	2018	08	11	13:50	67	85.9	0
20180811T135500	2018	08	11	13:55	66.9	86.2	0
20180811T140000	2018	08	11	14:00	66.9	86.4	0
20180811T140500	2018	08	11	14:05	66.9	89	0
20180811T141000	2018	08	11	14:10	66.9	87.9	0
20180811T141500	2018	08	11	14:15	66.8	87.2	0
20180811T142000	2018	08	11	14:20	66.9	88.1	0
20180811T142500	2018	08	11	14:25	66.9	88.7	0
20180811T143000	2018	08	11	14:30	66.8	87.9	0
20180811T143500	2018	08	11	14:35	66.9	88	0
20180811T144000	2018	08	11	14:40	66.9	88.9	0
20180811T144500	2018	08	11	14:45	67.2	90.2	0
20180811T145000	2018	08	11	14:50	67	90.4	0
20180811T145500	2018	08	11	14:55	66.9	90.4	0
20180811T150000	2018	08	11	15:00	66.9	90.6	0
20180811T150500	2018	08	11	15:05	67	91.3	0
20180811T151000	2018	08	11	15:10	66.8	91.3	0
20180811T151500	2018	08	11	15:15	66.9	92.2	0
20180811T152000	2018	08	11	15:20	67.2	92.4	0
20180811T152500	2018	08	11	15:25	67.4	91.2	0
20180811T153000	2018	08	11	15:30	67.8	90.8	0
20180811T153500	2018	08	11	15:35	67.8	89.7	0
20180811T154000	2018	08	11	15:40	67.8	89.2	0
20180811T154500	2018	08	11	15:45	67.8	89.4	0
20180811T155000	2018	08	11	15:50	67.9	89.3	0
20180811T155500	2018	08	11	15:55	67.9	89.1	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180811T160000	2018	08	11	16:00	68.2	91	0
20180811T160500	2018	08	11	16:05	68.2	90.6	0
20180811T161000	2018	08	11	16:10	68.7	91.4	0
20180811T161500	2018	08	11	16:15	68.8	89.6	0
20180811T162000	2018	08	11	16:20	68.7	88.9	0
20180811T162500	2018	08	11	16:25	68.8	88.6	0
20180811T163000	2018	08	11	16:30	69	88.1	0
20180811T163500	2018	08	11	16:35	69.1	87.1	0
20180811T164000	2018	08	11	16:40	69.5	87.3	0
20180811T164500	2018	08	11	16:45	69.4	86.8	0
20180811T165000	2018	08	11	16:50	69.5	87.7	0
20180811T165500	2018	08	11	16:55	69.2	84.6	0
20180811T170000	2018	08	11	17:00	68.8	85.7	0
20180811T170500	2018	08	11	17:05	68.5	88.7	0
20180811T171000	2018	08	11	17:10	68.4	87.6	0
20180811T171500	2018	08	11	17:15	68.4	87.7	0
20180811T172000	2018	08	11	17:20	68.2	87.1	0
20180811T172500	2018	08	11	17:25	68.2	87.9	0
20180811T173000	2018	08	11	17:30	68	87.2	0
20180811T173500	2018	08	11	17:35	68	87	0
20180811T174000	2018	08	11	17:40	68	88.2	0
20180811T174500	2018	08	11	17:45	68	89	0
20180811T175000	2018	08	11	17:50	67.8	88.5	0
20180811T175500	2018	08	11	17:55	67.9	89.4	0
20180811T180000	2018	08	11	18:00	68	89.8	0
20180811T180500	2018	08	11	18:05	68.2	89.6	0
20180811T181000	2018	08	11	18:10	68.3	88.9	0
20180811T181500	2018	08	11	18:15	68.4	89.3	0
20180811T182000	2018	08	11	18:20	68.3	89.3	0
20180811T182500	2018	08	11	18:25	68.2	89.3	0
20180811T183000	2018	08	11	18:30	68.3	90.5	0
20180811T183500	2018	08	11	18:35	68.3	89.6	0
20180811T184000	2018	08	11	18:40	68.2	89.6	0
20180811T184500	2018	08	11	18:45	68.2	90.4	0
20180811T185000	2018	08	11	18:50	68	90.5	0
20180811T185500	2018	08	11	18:55	67.7	91.3	0
20180811T190000	2018	08	11	19:00	67.7	92.2	0
20180811T190500	2018	08	11	19:05	67.7	92.3	0
20180811T191000	2018	08	11	19:10	67.5	92	0
20180811T191500	2018	08	11	19:15	67.5	91.9	0
20180811T192000	2018	08	11	19:20	67.3	92.4	0
20180811T192500	2018	08	11	19:25	67.3	92.6	0
20180811T193000	2018	08	11	19:30	67.2	93.2	0
20180811T193500	2018	08	11	19:35	67.1	93.4	0
20180811T194000	2018	08	11	19:40	67	93.7	0
20180811T194500	2018	08	11	19:45	67	93.7	0
20180811T195000	2018	08	11	19:50	67	93.9	0
20180811T195500	2018	08	11	19:55	66.9	94.2	0
20180811T200000	2018	08	11	20:00	66.9	94.5	0
20180811T200500	2018	08	11	20:05	66.9	94.6	0
20180811T201000	2018	08	11	20:10	66.9	94.6	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180811T201500	2018	08	11	20:15	66.9	94.6	0
20180811T202000	2018	08	11	20:20	66.8	94.8	0
20180811T202500	2018	08	11	20:25	66.8	95	0
20180811T203000	2018	08	11	20:30	66.7	94.9	0
20180811T203500	2018	08	11	20:35	66.8	94.9	0
20180811T204000	2018	08	11	20:40	66.8	94.6	0
20180811T204500	2018	08	11	20:45	66.9	94.3	0
20180811T205000	2018	08	11	20:50	66.8	94.7	0
20180811T205500	2018	08	11	20:55	66.7	95.4	0
20180811T210000	2018	08	11	21:00	66.5	96.1	0
20180811T210500	2018	08	11	21:05	66.4	96.6	0
20180811T211000	2018	08	11	21:10	66.4	97.1	0
20180811T211500	2018	08	11	21:15	66.4	97.1	0
20180811T212000	2018	08	11	21:20	66.4	97	0
20180811T212500	2018	08	11	21:25	66.4	97.1	0
20180811T213000	2018	08	11	21:30	66.4	97.2	0
20180811T213500	2018	08	11	21:35	66.4	97.4	0
20180811T214000	2018	08	11	21:40	66.5	97.5	0
20180811T214500	2018	08	11	21:45	66.5	97.4	0
20180811T215000	2018	08	11	21:50	66.5	97.4	0
20180811T215500	2018	08	11	21:55	66.4	97.4	0
20180811T220000	2018	08	11	22:00	66.3	97.6	0
20180811T220500	2018	08	11	22:05	66.3	97.6	0
20180811T221000	2018	08	11	22:10	66.2	97.7	0
20180811T221500	2018	08	11	22:15	66.2	97.7	0
20180811T222000	2018	08	11	22:20	66.3	97.7	0
20180811T222500	2018	08	11	22:25	66.4	97.7	0
20180811T223000	2018	08	11	22:30	66.3	97.7	0
20180811T223500	2018	08	11	22:35	66.3	97.4	0
20180811T224000	2018	08	11	22:40	66.3	97.3	0
20180811T224500	2018	08	11	22:45	66.3	97.2	0
20180811T225000	2018	08	11	22:50	66.4	97	0
20180811T225500	2018	08	11	22:55	66.4	96.7	0
20180811T230000	2018	08	11	23:00	66.5	96.4	0
20180811T230500	2018	08	11	23:05	66.4	96.2	0
20180811T231000	2018	08	11	23:10	66.4	96.1	0
20180811T231500	2018	08	11	23:15	66.1	96.5	0
20180811T232000	2018	08	11	23:20	66.1	96.8	0
20180811T232500	2018	08	11	23:25	66.1	96.9	0
20180811T233000	2018	08	11	23:30	66.1	96.9	0
20180811T233500	2018	08	11	23:35	66.2	97	0
20180811T234000	2018	08	11	23:40	66.1	97.1	0
20180811T234500	2018	08	11	23:45	66.1	97.4	0
20180811T235000	2018	08	11	23:50	66	97.8	0
20180811T235500	2018	08	11	23:55	66	97.9	0
20180812T000000	2018	08	12	00:00	66	97.9	0
20180812T000500	2018	08	12	00:05	66	97.6	0
20180812T001000	2018	08	12	00:10	65.9	96.9	0
20180812T001500	2018	08	12	00:15	65.5	96.9	0
20180812T002000	2018	08	12	00:20	65.5	97.4	0
20180812T002500	2018	08	12	00:25	65.5	97.9	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180812T003000	2018	08	12	00:30	65.7	97.5	0
20180812T003500	2018	08	12	00:35	65.8	97.3	0
20180812T004000	2018	08	12	00:40	65.9	97.1	0
20180812T004500	2018	08	12	00:45	66.1	96.5	0
20180812T005000	2018	08	12	00:50	65.6	96.3	0
20180812T005500	2018	08	12	00:55	65.5	97	0
20180812T010000	2018	08	12	01:00	65.5	97.9	0
20180812T010500	2018	08	12	01:05	65.6	98.4	0
20180812T011000	2018	08	12	01:10	65.7	98.7	0
20180812T011500	2018	08	12	01:15	65.7	98.8	0
20180812T012000	2018	08	12	01:20	65.1	98.4	0
20180812T012500	2018	08	12	01:25	65.4	98.5	0
20180812T013000	2018	08	12	01:30	65.5	98.8	0
20180812T013500	2018	08	12	01:35	65.5	99	0
20180812T014000	2018	08	12	01:40	65.6	99	0
20180812T014500	2018	08	12	01:45	65.6	99	0
20180812T015000	2018	08	12	01:50	65.6	99	0
20180812T015500	2018	08	12	01:55	65.5	99	0
20180812T020000	2018	08	12	02:00	65.3	98.9	0
20180812T020500	2018	08	12	02:05	64.9	98.8	0
20180812T021000	2018	08	12	02:10	64.5	98.7	0
20180812T021500	2018	08	12	02:15	64.4	98.7	0
20180812T022000	2018	08	12	02:20	64.6	98.9	0
20180812T022500	2018	08	12	02:25	64.7	99.1	0
20180812T023000	2018	08	12	02:30	64.9	99.2	0
20180812T023500	2018	08	12	02:35	65.1	99.3	0
20180812T024000	2018	08	12	02:40	65.2	99.3	0
20180812T024500	2018	08	12	02:45	65.2	99.3	0
20180812T025000	2018	08	12	02:50	64.9	99	0
20180812T025500	2018	08	12	02:55	64.4	98.9	0
20180812T030000	2018	08	12	03:00	64.4	99	0
20180812T030500	2018	08	12	03:05	64.4	99.2	0
20180812T031000	2018	08	12	03:10	64.4	99.3	0
20180812T031500	2018	08	12	03:15	64.4	99.3	0
20180812T032000	2018	08	12	03:20	64.5	99.3	0
20180812T032500	2018	08	12	03:25	64.8	99.4	0
20180812T033000	2018	08	12	03:30	64.7	99.5	0
20180812T033500	2018	08	12	03:35	64.4	99.4	0
20180812T034000	2018	08	12	03:40	64.4	99.4	0
20180812T034500	2018	08	12	03:45	64.3	99.4	0
20180812T035000	2018	08	12	03:50	64.3	99.4	0
20180812T035500	2018	08	12	03:55	64.3	99.5	0
20180812T040000	2018	08	12	04:00	64.4	99.5	0
20180812T040500	2018	08	12	04:05	64.7	99.6	0
20180812T041000	2018	08	12	04:10	64.6	99.6	0
20180812T041500	2018	08	12	04:15	64.6	99.6	0
20180812T042000	2018	08	12	04:20	64.8	99.6	0
20180812T042500	2018	08	12	04:25	64.8	99.6	0
20180812T043000	2018	08	12	04:30	64.5	99.6	0
20180812T043500	2018	08	12	04:35	64.2	99.5	0
20180812T044000	2018	08	12	04:40	63.9	99.5	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180812T044500	2018	08	12	04:45	63.5	99.4	0
20180812T045000	2018	08	12	04:50	63.6	99.5	0
20180812T045500	2018	08	12	04:55	64.2	99.7	0
20180812T050000	2018	08	12	05:00	64.5	99.7	0
20180812T050500	2018	08	12	05:05	64.6	99.6	0
20180812T051000	2018	08	12	05:10	64.8	99.6	0
20180812T051500	2018	08	12	05:15	64.8	99.5	0
20180812T052000	2018	08	12	05:20	64.5	99.2	0
20180812T052500	2018	08	12	05:25	64.2	99	0
20180812T053000	2018	08	12	05:30	64	98.9	0
20180812T053500	2018	08	12	05:35	64	98.9	0
20180812T054000	2018	08	12	05:40	64.1	98.8	0
20180812T054500	2018	08	12	05:45	64.1	98.4	0
20180812T055000	2018	08	12	05:50	63.7	98.4	0
20180812T055500	2018	08	12	05:55	64.1	98.2	0
20180812T060000	2018	08	12	06:00	64.2	98.1	0
20180812T060500	2018	08	12	06:05	64.6	98.2	0
20180812T061000	2018	08	12	06:10	64.5	98.2	0
20180812T061500	2018	08	12	06:15	64.6	98.6	0
20180812T062000	2018	08	12	06:20	64.7	98.9	0
20180812T062500	2018	08	12	06:25	64.8	99	0
20180812T063000	2018	08	12	06:30	64.9	99	0
20180812T063500	2018	08	12	06:35	65.1	99.1	0
20180812T064000	2018	08	12	06:40	65.2	99.1	0
20180812T064500	2018	08	12	06:45	65.4	99.2	0
20180812T065000	2018	08	12	06:50	65.5	99.2	0
20180812T065500	2018	08	12	06:55	65.6	99.2	0
20180812T070000	2018	08	12	07:00	65.7	99.1	0
20180812T070500	2018	08	12	07:05	65.8	98.9	0
20180812T071000	2018	08	12	07:10	65.9	98.7	0
20180812T071500	2018	08	12	07:15	66	98.5	0
20180812T072000	2018	08	12	07:20	66.1	98.2	0
20180812T072500	2018	08	12	07:25	66.3	97.9	0
20180812T073000	2018	08	12	07:30	66.5	97.7	0
20180812T073500	2018	08	12	07:35	66.5	97.6	0
20180812T074000	2018	08	12	07:40	66.6	97	0
20180812T074500	2018	08	12	07:45	66.7	96.3	0
20180812T075000	2018	08	12	07:50	66.8	96.2	0
20180812T075500	2018	08	12	07:55	66.8	96	0
20180812T080000	2018	08	12	08:00	66.9	94.7	0
20180812T080500	2018	08	12	08:05	67	94.3	0
20180812T081000	2018	08	12	08:10	67.2	94.1	0
20180812T081500	2018	08	12	08:15	67.3	92.6	0
20180812T082000	2018	08	12	08:20	67.4	91.5	0
20180812T082500	2018	08	12	08:25	67.4	92.9	0
20180812T083000	2018	08	12	08:30	67.4	92.9	0
20180812T083500	2018	08	12	08:35	67.6	92.1	0
20180812T084000	2018	08	12	08:40	67.8	90.8	0
20180812T084500	2018	08	12	08:45	67.8	89.5	0
20180812T085000	2018	08	12	08:50	68	91.7	0
20180812T085500	2018	08	12	08:55	68	90.5	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180812T090000	2018	08	12	09:00	68.2	90.4	0
20180812T090500	2018	08	12	09:05	68.3	89.6	0
20180812T091000	2018	08	12	09:10	68.4	90.4	0
20180812T091500	2018	08	12	09:15	68.8	88.5	0
20180812T092000	2018	08	12	09:20	69.1	88	0
20180812T092500	2018	08	12	09:25	69.4	87.6	0
20180812T093000	2018	08	12	09:30	69.4	87	0
20180812T093500	2018	08	12	09:35	69.4	86.8	0
20180812T094000	2018	08	12	09:40	69	86	0
20180812T094500	2018	08	12	09:45	68.8	86.5	0
20180812T095000	2018	08	12	09:50	69	87	0
20180812T095500	2018	08	12	09:55	69	86.4	0
20180812T100000	2018	08	12	10:00	69	87.6	0
20180812T100500	2018	08	12	10:05	68.8	87.1	0
20180812T101000	2018	08	12	10:10	68.8	87.5	0
20180812T101500	2018	08	12	10:15	68.9	86.5	0
20180812T102000	2018	08	12	10:20	69.2	85.5	0
20180812T102500	2018	08	12	10:25	69.5	85.6	0
20180812T103000	2018	08	12	10:30	69.8	84.2	0
20180812T103500	2018	08	12	10:35	69.9	83.1	0
20180812T104000	2018	08	12	10:40	70.1	83.5	0
20180812T104500	2018	08	12	10:45	70.8	83	0
20180812T105000	2018	08	12	10:50	71.3	80.8	0
20180812T105500	2018	08	12	10:55	71.4	78.9	0
20180812T110000	2018	08	12	11:00	71.3	77.8	0
20180812T110500	2018	08	12	11:05	71.3	77.5	0
20180812T111000	2018	08	12	11:10	71.2	77.7	0
20180812T111500	2018	08	12	11:15	71.1	79.2	0
20180812T112000	2018	08	12	11:20	71.4	78.1	0
20180812T112500	2018	08	12	11:25	71.7	77.3	0
20180812T113000	2018	08	12	11:30	71.5	78.3	0
20180812T113500	2018	08	12	11:35	71.6	78.1	0
20180812T114000	2018	08	12	11:40	72.2	78.6	0
20180812T114500	2018	08	12	11:45	72	78.7	0
20180812T115000	2018	08	12	11:50	71.6	78.9	0
20180812T115500	2018	08	12	11:55	71.3	79.4	0
20180812T120000	2018	08	12	12:00	71.2	78.6	0
20180812T120500	2018	08	12	12:05	71.4	78	0
20180812T121000	2018	08	12	12:10	71.6	77.3	0
20180812T121500	2018	08	12	12:15	71.5	77.2	0
20180812T122000	2018	08	12	12:20	71.6	77.2	0
20180812T122500	2018	08	12	12:25	71.7	77.3	0
20180812T123000	2018	08	12	12:30	72	77.2	0
20180812T123500	2018	08	12	12:35	72.7	78.8	0
20180812T124000	2018	08	12	12:40	72.5	76.6	0
20180812T124500	2018	08	12	12:45	72.4	76.5	0
20180812T125000	2018	08	12	12:50	72.2	75.6	0
20180812T125500	2018	08	12	12:55	72.4	77.3	0
20180812T130000	2018	08	12	13:00	72.6	77.8	0
20180812T130500	2018	08	12	13:05	72.9	77.6	0
20180812T131000	2018	08	12	13:10	72.7	76.8	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180812T131500	2018	08	12	13:15	73	76.8	0
20180812T132000	2018	08	12	13:20	72.6	76.9	0
20180812T132500	2018	08	12	13:25	72.4	76.4	0
20180812T133000	2018	08	12	13:30	72.2	77.3	0
20180812T133500	2018	08	12	13:35	71.9	77.7	0
20180812T134000	2018	08	12	13:40	71.8	78.5	0
20180812T134500	2018	08	12	13:45	71.8	79	0
20180812T135000	2018	08	12	13:50	72	79.1	0
20180812T135500	2018	08	12	13:55	72.7	79.3	0
20180812T140000	2018	08	12	14:00	73.3	78.6	0
20180812T140500	2018	08	12	14:05	73.5	76.5	0
20180812T141000	2018	08	12	14:10	73.4	76.5	0
20180812T141500	2018	08	12	14:15	73.5	75.3	0
20180812T142000	2018	08	12	14:20	74.3	75.3	0
20180812T142500	2018	08	12	14:25	73.9	74.5	0
20180812T143000	2018	08	12	14:30	74.2	75	0
20180812T143500	2018	08	12	14:35	74.3	75.2	0
20180812T144000	2018	08	12	14:40	73.7	75.1	0
20180812T144500	2018	08	12	14:45	74	75.6	0
20180812T145000	2018	08	12	14:50	74.2	75.1	0
20180812T145500	2018	08	12	14:55	73.9	75.5	0
20180812T150000	2018	08	12	15:00	74	75.4	0
20180812T150500	2018	08	12	15:05	73.8	75	0
20180812T151000	2018	08	12	15:10	73.9	76.2	0
20180812T151500	2018	08	12	15:15	74	76.3	0
20180812T152000	2018	08	12	15:20	74.3	75.7	0
20180812T152500	2018	08	12	15:25	74.1	76	0
20180812T153000	2018	08	12	15:30	73.5	77.5	0
20180812T153500	2018	08	12	15:35	73.3	79.1	0
20180812T154000	2018	08	12	15:40	73.3	77.3	0
20180812T154500	2018	08	12	15:45	73.3	76.3	0
20180812T155000	2018	08	12	15:50	73.3	76.2	0
20180812T155500	2018	08	12	15:55	73.7	75.5	0
20180812T160000	2018	08	12	16:00	73.7	74.8	0
20180812T160500	2018	08	12	16:05	74.2	75.3	0
20180812T161000	2018	08	12	16:10	74.9	75.5	0
20180812T161500	2018	08	12	16:15	75.4	73.2	0
20180812T162000	2018	08	12	16:20	75.6	73.4	0
20180812T162500	2018	08	12	16:25	75.9	72.2	0
20180812T163000	2018	08	12	16:30	75.5	74.4	0
20180812T163500	2018	08	12	16:35	75.6	73.9	0
20180812T164000	2018	08	12	16:40	76	74	0
20180812T164500	2018	08	12	16:45	75.6	75	0
20180812T165000	2018	08	12	16:50	75.8	74.5	0
20180812T165500	2018	08	12	16:55	75.7	74.7	0
20180812T170000	2018	08	12	17:00	76.3	73.3	0
20180812T170500	2018	08	12	17:05	76.4	73.8	0
20180812T171000	2018	08	12	17:10	75.9	74.1	0
20180812T171500	2018	08	12	17:15	75.2	75	0
20180812T172000	2018	08	12	17:20	75.9	74.5	0
20180812T172500	2018	08	12	17:25	74.8	75.7	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180812T173000	2018	08	12	17:30	74.6	76.7	0
20180812T173500	2018	08	12	17:35	74.6	75.5	0
20180812T174000	2018	08	12	17:40	74.3	77.5	0
20180812T174500	2018	08	12	17:45	74.2	77.5	0
20180812T175000	2018	08	12	17:50	73.9	78	0
20180812T175500	2018	08	12	17:55	74.1	77.2	0
20180812T180000	2018	08	12	18:00	74.4	76.6	0
20180812T180500	2018	08	12	18:05	74.5	77.5	0
20180812T181000	2018	08	12	18:10	74.4	77.3	0
20180812T181500	2018	08	12	18:15	74.5	78.6	0
20180812T182000	2018	08	12	18:20	74.7	77.7	0
20180812T182500	2018	08	12	18:25	74.8	75.5	0
20180812T183000	2018	08	12	18:30	74.4	76.2	0
20180812T183500	2018	08	12	18:35	74	76.8	0
20180812T184000	2018	08	12	18:40	73.8	78.4	0
20180812T184500	2018	08	12	18:45	74.2	79.2	0
20180812T185000	2018	08	12	18:50	74.3	78.1	0
20180812T185500	2018	08	12	18:55	74.4	78.4	0
20180812T190000	2018	08	12	19:00	74.7	78.6	0
20180812T190500	2018	08	12	19:05	74.7	78.1	0
20180812T191000	2018	08	12	19:10	74.4	78.7	0
20180812T191500	2018	08	12	19:15	74.3	78.4	0
20180812T192000	2018	08	12	19:20	74.2	79.1	0
20180812T192500	2018	08	12	19:25	73.7	79	0
20180812T193000	2018	08	12	19:30	73.2	80.5	0
20180812T193500	2018	08	12	19:35	73	80.9	0
20180812T194000	2018	08	12	19:40	72.9	81.1	0
20180812T194500	2018	08	12	19:45	72.7	81.3	0
20180812T195000	2018	08	12	19:50	72.3	82.5	0
20180812T195500	2018	08	12	19:55	71.8	83.1	0
20180812T200000	2018	08	12	20:00	71.3	84.6	0
20180812T200500	2018	08	12	20:05	71.3	84.8	0
20180812T201000	2018	08	12	20:10	70.9	85.6	0
20180812T201500	2018	08	12	20:15	70.5	86.8	0
20180812T202000	2018	08	12	20:20	70.4	87.6	0
20180812T202500	2018	08	12	20:25	70.5	87.9	0
20180812T203000	2018	08	12	20:30	70.7	87.7	0
20180812T203500	2018	08	12	20:35	70.4	87.9	0
20180812T204000	2018	08	12	20:40	70.2	88.4	0
20180812T204500	2018	08	12	20:45	70.3	88.8	0
20180812T205000	2018	08	12	20:50	70.5	88.4	0
20180812T205500	2018	08	12	20:55	70.5	88.3	0
20180812T210000	2018	08	12	21:00	70.4	88.4	0
20180812T210500	2018	08	12	21:05	70.4	88.7	0
20180812T211000	2018	08	12	21:10	70.2	89.1	0
20180812T211500	2018	08	12	21:15	70.2	89.4	0
20180812T212000	2018	08	12	21:20	70.1	89.5	0
20180812T212500	2018	08	12	21:25	70	90	0
20180812T213000	2018	08	12	21:30	70	90	0
20180812T213500	2018	08	12	21:35	69.8	90.2	0
20180812T214000	2018	08	12	21:40	69.5	90.6	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180812T214500	2018	08	12	21:45	69.5	90.6	0
20180812T215000	2018	08	12	21:50	69.3	90.7	0
20180812T215500	2018	08	12	21:55	69.2	91.2	0
20180812T220000	2018	08	12	22:00	69.1	91.5	0
20180812T220500	2018	08	12	22:05	68.9	91.7	0
20180812T221000	2018	08	12	22:10	68.8	91.7	0
20180812T221500	2018	08	12	22:15	68.7	91.8	0
20180812T222000	2018	08	12	22:20	69.1	91.1	0
20180812T222500	2018	08	12	22:25	69.3	90.5	0
20180812T223000	2018	08	12	22:30	69.3	90.2	0
20180812T223500	2018	08	12	22:35	69.4	89.9	0
20180812T224000	2018	08	12	22:40	69.4	89.7	0
20180812T224500	2018	08	12	22:45	69.6	89	0
20180812T225000	2018	08	12	22:50	69.6	88.8	0
20180812T225500	2018	08	12	22:55	69.7	88.9	0
20180812T230000	2018	08	12	23:00	69.7	88.7	0
20180812T230500	2018	08	12	23:05	69.4	89.3	0
20180812T231000	2018	08	12	23:10	69.2	89.8	0
20180812T231500	2018	08	12	23:15	69.1	90.1	0
20180812T232000	2018	08	12	23:20	68.8	90.6	0
20180812T232500	2018	08	12	23:25	68.9	90.7	0
20180812T233000	2018	08	12	23:30	69	90.2	0
20180812T233500	2018	08	12	23:35	68.6	90.3	0
20180812T234000	2018	08	12	23:40	68.3	91	0
20180812T234500	2018	08	12	23:45	68	91.7	0
20180812T235000	2018	08	12	23:50	68	92.4	0
20180812T235500	2018	08	12	23:55	68.1	92.5	0
20180813T000000	2018	08	13	00:00	67.5	93.5	0
20180813T000500	2018	08	13	00:05	67.1	94.4	0
20180813T001000	2018	08	13	00:10	67.2	94.7	0
20180813T001500	2018	08	13	00:15	67.3	94.4	0
20180813T002000	2018	08	13	00:20	67.2	94.2	0
20180813T002500	2018	08	13	00:25	67.1	94.5	0
20180813T003000	2018	08	13	00:30	66.6	93.7	0
20180813T003500	2018	08	13	00:35	66.2	94.9	0
20180813T004000	2018	08	13	00:40	66.7	96.2	0
20180813T004500	2018	08	13	00:45	67.1	96.3	0
20180813T005000	2018	08	13	00:50	67.6	95.5	0
20180813T005500	2018	08	13	00:55	67.7	94.3	0
20180813T010000	2018	08	13	01:00	67.8	94	0
20180813T010500	2018	08	13	01:05	67.6	93.9	0
20180813T011000	2018	08	13	01:10	67.6	93.8	0
20180813T011500	2018	08	13	01:15	67.5	93.5	0
20180813T012000	2018	08	13	01:20	67.6	93.1	0
20180813T012500	2018	08	13	01:25	67.5	93.1	0
20180813T013000	2018	08	13	01:30	67.7	92.9	0
20180813T013500	2018	08	13	01:35	67.6	92.5	0
20180813T014000	2018	08	13	01:40	67.7	92.8	0
20180813T014500	2018	08	13	01:45	67.9	92.3	0
20180813T015000	2018	08	13	01:50	67.8	92.1	0
20180813T015500	2018	08	13	01:55	67.6	92.6	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180813T020000	2018	08	13	02:00	67.5	93.2	0
20180813T020500	2018	08	13	02:05	67.6	93.8	0
20180813T021000	2018	08	13	02:10	67.7	93.7	0
20180813T021500	2018	08	13	02:15	67.7	93.6	0
20180813T022000	2018	08	13	02:20	67.3	94.3	0
20180813T022500	2018	08	13	02:25	67.4	94.3	0
20180813T023000	2018	08	13	02:30	67.5	93.8	0
20180813T023500	2018	08	13	02:35	67.5	93.6	0
20180813T024000	2018	08	13	02:40	67.4	93.4	0
20180813T024500	2018	08	13	02:45	67.2	93.2	0
20180813T025000	2018	08	13	02:50	67.2	93.3	0
20180813T025500	2018	08	13	02:55	66.9	93.2	0
20180813T030000	2018	08	13	03:00	67	93.5	0
20180813T030500	2018	08	13	03:05	66.6	93.9	0
20180813T031000	2018	08	13	03:10	65.8	95.4	0
20180813T031500	2018	08	13	03:15	65.8	96.4	0
20180813T032000	2018	08	13	03:20	65.6	96.9	0
20180813T032500	2018	08	13	03:25	65.9	97.2	0
20180813T033000	2018	08	13	03:30	65.4	96.8	0
20180813T033500	2018	08	13	03:35	65.4	96.9	0
20180813T034000	2018	08	13	03:40	65.5	97.5	0
20180813T034500	2018	08	13	03:45	65	96.9	0
20180813T035000	2018	08	13	03:50	65.2	97.9	0
20180813T035500	2018	08	13	03:55	65.1	98.1	0
20180813T040000	2018	08	13	04:00	65.3	98.4	0
20180813T040500	2018	08	13	04:05	65.1	98.3	0
20180813T041000	2018	08	13	04:10	65.1	98.2	0
20180813T041500	2018	08	13	04:15	64.9	98.1	0
20180813T042000	2018	08	13	04:20	65.5	98.7	0
20180813T042500	2018	08	13	04:25	65.8	98.5	0
20180813T043000	2018	08	13	04:30	66.2	98.3	0
20180813T043500	2018	08	13	04:35	66.2	97.9	0
20180813T044000	2018	08	13	04:40	66.1	97.9	0
20180813T044500	2018	08	13	04:45	66.4	97.4	0
20180813T045000	2018	08	13	04:50	66.5	97	0
20180813T045500	2018	08	13	04:55	66.6	96.6	0
20180813T050000	2018	08	13	05:00	66.7	96.2	0
20180813T050500	2018	08	13	05:05	67.1	95.5	0
20180813T051000	2018	08	13	05:10	66.9	95.4	0
20180813T051500	2018	08	13	05:15	66.9	95.3	0
20180813T052000	2018	08	13	05:20	66.8	95.1	0
20180813T052500	2018	08	13	05:25	66.8	95.1	0
20180813T053000	2018	08	13	05:30	66.7	95.4	0
20180813T053500	2018	08	13	05:35	66.5	96.4	0
20180813T054000	2018	08	13	05:40	66.5	96.9	0
20180813T054500	2018	08	13	05:45	66.6	96.8	0
20180813T055000	2018	08	13	05:50	66.7	96.7	0
20180813T055500	2018	08	13	05:55	66.9	96.4	0
20180813T060000	2018	08	13	06:00	66.9	95.8	0
20180813T060500	2018	08	13	06:05	66.9	95.8	0
20180813T061000	2018	08	13	06:10	67.1	95.1	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180813T061500	2018	08	13	06:15	67.2	94.8	0
20180813T062000	2018	08	13	06:20	67	95.2	0
20180813T062500	2018	08	13	06:25	67	95.3	0
20180813T063000	2018	08	13	06:30	67.2	95.2	0
20180813T063500	2018	08	13	06:35	67.3	94.5	0
20180813T064000	2018	08	13	06:40	67.4	94.8	0
20180813T064500	2018	08	13	06:45	67.5	94.5	0
20180813T065000	2018	08	13	06:50	67.8	93	0
20180813T065500	2018	08	13	06:55	67.9	93.2	0
20180813T070000	2018	08	13	07:00	68	93.4	0
20180813T070500	2018	08	13	07:05	68.1	92.5	0
20180813T071000	2018	08	13	07:10	68.2	91.7	0
20180813T071500	2018	08	13	07:15	68.4	90.6	0
20180813T072000	2018	08	13	07:20	68.3	91.2	0
20180813T072500	2018	08	13	07:25	68.1	93.2	0
20180813T073000	2018	08	13	07:30	68.3	93.3	0
20180813T073500	2018	08	13	07:35	68.7	91.7	0
20180813T074000	2018	08	13	07:40	69.2	89.2	0
20180813T074500	2018	08	13	07:45	69.4	87.7	0
20180813T075000	2018	08	13	07:50	69.7	87.8	0
20180813T075500	2018	08	13	07:55	69.8	85.7	0
20180813T080000	2018	08	13	08:00	70.4	85.5	0
20180813T080500	2018	08	13	08:05	70.8	83.8	0
20180813T081000	2018	08	13	08:10	71	83	0
20180813T081500	2018	08	13	08:15	71.1	84.4	0
20180813T082000	2018	08	13	08:20	71	84.9	0
20180813T082500	2018	08	13	08:25	71.2	85.2	0
20180813T083000	2018	08	13	08:30	71	85.1	0
20180813T083500	2018	08	13	08:35	71.5	84.2	0
20180813T084000	2018	08	13	08:40	71.8	83.2	0
20180813T084500	2018	08	13	08:45	72.1	83.5	0
20180813T085000	2018	08	13	08:50	72.3	82.5	0
20180813T085500	2018	08	13	08:55	72.2	81.4	0
20180813T090000	2018	08	13	09:00	72.8	82.6	0
20180813T090500	2018	08	13	09:05	72.7	79.9	0
20180813T091000	2018	08	13	09:10	73.8	78.3	0
20180813T091500	2018	08	13	09:15	73.4	78.7	0
20180813T092000	2018	08	13	09:20	73.6	81	0
20180813T092500	2018	08	13	09:25	73.2	78.5	0
20180813T093000	2018	08	13	09:30	73.8	79.6	0
20180813T093500	2018	08	13	09:35	73.3	78.9	0
20180813T094000	2018	08	13	09:40	72.8	80.3	0
20180813T094500	2018	08	13	09:45	72.9	81.1	0
20180813T095000	2018	08	13	09:50	73.1	81.5	0
20180813T095500	2018	08	13	09:55	72.6	80.4	0
20180813T100000	2018	08	13	10:00	72.9	80.8	0
20180813T100500	2018	08	13	10:05	73.4	81.3	0
20180813T101000	2018	08	13	10:10	73.9	80.1	0
20180813T101500	2018	08	13	10:15	73.9	79.6	0
20180813T102000	2018	08	13	10:20	74.1	79.5	0
20180813T102500	2018	08	13	10:25	74.3	79.4	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180813T103000	2018	08	13	10:30	74.2	78.9	0
20180813T103500	2018	08	13	10:35	74	77.7	0
20180813T104000	2018	08	13	10:40	74.1	78.6	0
20180813T104500	2018	08	13	10:45	74.3	78.4	0
20180813T105000	2018	08	13	10:50	75.2	78	0
20180813T105500	2018	08	13	10:55	75.2	77.2	0
20180813T110000	2018	08	13	11:00	74.7	76.8	0
20180813T110500	2018	08	13	11:05	74.8	77.9	0
20180813T111000	2018	08	13	11:10	74.8	77.9	0
20180813T111500	2018	08	13	11:15	75.1	78.4	0
20180813T112000	2018	08	13	11:20	75	77.6	0
20180813T112500	2018	08	13	11:25	74.8	77.7	0
20180813T113000	2018	08	13	11:30	75	77.7	0
20180813T113500	2018	08	13	11:35	75.1	77.5	0
20180813T114000	2018	08	13	11:40	75.1	77.9	0
20180813T114500	2018	08	13	11:45	74.6	77.2	0
20180813T115000	2018	08	13	11:50	74.5	78	0
20180813T115500	2018	08	13	11:55	74.6	78.3	0
20180813T120000	2018	08	13	12:00	74.9	77.5	0
20180813T120500	2018	08	13	12:05	75.1	76.9	0
20180813T121000	2018	08	13	12:10	74.9	76.7	0
20180813T121500	2018	08	13	12:15	75.3	76.7	0
20180813T122000	2018	08	13	12:20	75.2	77.2	0
20180813T122500	2018	08	13	12:25	75.3	75.3	0
20180813T123000	2018	08	13	12:30	75.3	74.6	0
20180813T123500	2018	08	13	12:35	75.5	74.5	0
20180813T124000	2018	08	13	12:40	75.5	74.8	0
20180813T124500	2018	08	13	12:45	75.5	75.8	0
20180813T125000	2018	08	13	12:50	75.5	76.2	0
20180813T125500	2018	08	13	12:55	75.6	76.6	0
20180813T130000	2018	08	13	13:00	76	75.2	0
20180813T130500	2018	08	13	13:05	76.1	76.1	0
20180813T131000	2018	08	13	13:10	76	76.3	0
20180813T131500	2018	08	13	13:15	76	76	0
20180813T132000	2018	08	13	13:20	75.6	75.4	0
20180813T132500	2018	08	13	13:25	76.1	75.9	0
20180813T133000	2018	08	13	13:30	76.3	76.4	0
20180813T133500	2018	08	13	13:35	76	76.2	0
20180813T134000	2018	08	13	13:40	75.8	76.3	0
20180813T134500	2018	08	13	13:45	75.7	76.5	0
20180813T135000	2018	08	13	13:50	76	76.6	0
20180813T135500	2018	08	13	13:55	76.1	76.4	0
20180813T140000	2018	08	13	14:00	76.3	75.9	0
20180813T140500	2018	08	13	14:05	76.3	76	0
20180813T141000	2018	08	13	14:10	76.2	74.8	0
20180813T141500	2018	08	13	14:15	76.5	75.7	0
20180813T142000	2018	08	13	14:20	76.4	75.5	0
20180813T142500	2018	08	13	14:25	76.1	75.5	0
20180813T143000	2018	08	13	14:30	76	76.5	0
20180813T143500	2018	08	13	14:35	75.9	75.8	0
20180813T144000	2018	08	13	14:40	75.7	76.1	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180813T144500	2018	08	13	14:45	75.7	77.2	0
20180813T145000	2018	08	13	14:50	76	78.2	0
20180813T145500	2018	08	13	14:55	76.1	77.1	0
20180813T150000	2018	08	13	15:00	76.1	76.8	0
20180813T150500	2018	08	13	15:05	75.8	75.7	0
20180813T151000	2018	08	13	15:10	76	77.5	0
20180813T151500	2018	08	13	15:15	76	77	0
20180813T152000	2018	08	13	15:20	76	76.9	0
20180813T152500	2018	08	13	15:25	76	75.4	0
20180813T153000	2018	08	13	15:30	76	78.1	0
20180813T153500	2018	08	13	15:35	75.7	77.4	0
20180813T154000	2018	08	13	15:40	75.5	77.3	0
20180813T154500	2018	08	13	15:45	75.5	77.6	0
20180813T155000	2018	08	13	15:50	75.6	77.9	0
20180813T155500	2018	08	13	15:55	75.3	77	0
20180813T160000	2018	08	13	16:00	75	79.2	0
20180813T160500	2018	08	13	16:05	74.8	81.8	0
20180813T161000	2018	08	13	16:10	74.6	81.6	0
20180813T161500	2018	08	13	16:15	74.4	82.6	0
20180813T162000	2018	08	13	16:20	74.3	85	0
20180813T162500	2018	08	13	16:25	74	83.3	0
20180813T163000	2018	08	13	16:30	73.7	82.4	0
20180813T163500	2018	08	13	16:35	73.8	83	0
20180813T164000	2018	08	13	16:40	73.7	85.5	0
20180813T164500	2018	08	13	16:45	73.4	87	0
20180813T165000	2018	08	13	16:50	72.7	88.7	0
20180813T165500	2018	08	13	16:55	72.4	89	0
20180813T170000	2018	08	13	17:00	72.2	90	0
20180813T170500	2018	08	13	17:05	72.4	89.6	0
20180813T171000	2018	08	13	17:10	72.8	90.3	0
20180813T171500	2018	08	13	17:15	73	89.7	0
20180813T172000	2018	08	13	17:20	72.8	87.9	0
20180813T172500	2018	08	13	17:25	72.7	89.2	0
20180813T173000	2018	08	13	17:30	72.6	89.2	0
20180813T173500	2018	08	13	17:35	72.5	89.7	0
20180813T174000	2018	08	13	17:40	72.5	90	0
20180813T174500	2018	08	13	17:45	72.5	89.6	0
20180813T175000	2018	08	13	17:50	72.4	89.9	0
20180813T175500	2018	08	13	17:55	72.4	90.2	0
20180813T180000	2018	08	13	18:00	72.3	91	0
20180813T180500	2018	08	13	18:05	72.2	90.4	0.01
20180813T181000	2018	08	13	18:10	72	91.7	0
20180813T181500	2018	08	13	18:15	71.8	92.7	0.01
20180813T182000	2018	08	13	18:20	71.1	95.3	0.01
20180813T182500	2018	08	13	18:25	70.6	96.5	0.01
20180813T183000	2018	08	13	18:30	70.4	97.2	0.03
20180813T183500	2018	08	13	18:35	70.3	97.7	0.01
20180813T184000	2018	08	13	18:40	70.2	98.1	0.05
20180813T184500	2018	08	13	18:45	70.3	98.3	0.01
20180813T185000	2018	08	13	18:50	70.2	98.4	0.01
20180813T185500	2018	08	13	18:55	70.2	98.3	0.01

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180813T190000	2018	08	13	19:00	70.2	98.1	0.02
20180813T190500	2018	08	13	19:05	70.1	97.8	0
20180813T191000	2018	08	13	19:10	70.1	97.9	0
20180813T191500	2018	08	13	19:15	70.2	97.6	0
20180813T192000	2018	08	13	19:20	70.2	97.4	0
20180813T192500	2018	08	13	19:25	70.2	97.2	0
20180813T193000	2018	08	13	19:30	70.2	97.2	0
20180813T193500	2018	08	13	19:35	70.2	97.3	0
20180813T194000	2018	08	13	19:40	70.1	96.8	0.01
20180813T194500	2018	08	13	19:45	69.9	96.9	0
20180813T195000	2018	08	13	19:50	69.8	97.6	0
20180813T195500	2018	08	13	19:55	69.9	97.9	0
20180813T200000	2018	08	13	20:00	70.1	97.7	0
20180813T200500	2018	08	13	20:05	70	97.5	0
20180813T201000	2018	08	13	20:10	69.8	97.5	0
20180813T201500	2018	08	13	20:15	69.7	97.8	0
20180813T202000	2018	08	13	20:20	69.6	98	0
20180813T202500	2018	08	13	20:25	69.7	98.3	0
20180813T203000	2018	08	13	20:30	69.8	98.3	0
20180813T203500	2018	08	13	20:35	69.8	98.3	0
20180813T204000	2018	08	13	20:40	69.9	98.2	0
20180813T204500	2018	08	13	20:45	69.9	97.9	0
20180813T205000	2018	08	13	20:50	69.9	97.5	0
20180813T205500	2018	08	13	20:55	69.8	97.3	0
20180813T210000	2018	08	13	21:00	69.8	97.5	0
20180813T210500	2018	08	13	21:05	69.8	97.7	0
20180813T211000	2018	08	13	21:10	69.7	97.8	0
20180813T211500	2018	08	13	21:15	69.8	97.4	0
20180813T212000	2018	08	13	21:20	69.8	96.8	0
20180813T212500	2018	08	13	21:25	69.8	96.4	0
20180813T213000	2018	08	13	21:30	69.8	96.2	0
20180813T213500	2018	08	13	21:35	69.7	95.9	0
20180813T214000	2018	08	13	21:40	69.6	96	0
20180813T214500	2018	08	13	21:45	69.4	96.3	0
20180813T215000	2018	08	13	21:50	69.3	96.9	0
20180813T215500	2018	08	13	21:55	69.2	96.9	0
20180813T220000	2018	08	13	22:00	69.2	96.9	0
20180813T220500	2018	08	13	22:05	69.1	97.1	0
20180813T221000	2018	08	13	22:10	69.1	97	0
20180813T221500	2018	08	13	22:15	69.1	97.1	0
20180813T222000	2018	08	13	22:20	69.2	96.3	0
20180813T222500	2018	08	13	22:25	69.2	95.7	0
20180813T223000	2018	08	13	22:30	69.1	95.5	0
20180813T223500	2018	08	13	22:35	68.9	95.8	0
20180813T224000	2018	08	13	22:40	68.9	95.5	0
20180813T224500	2018	08	13	22:45	68.8	95.9	0.01
20180813T225000	2018	08	13	22:50	68.7	96.3	0
20180813T225500	2018	08	13	22:55	68.6	96.5	0
20180813T230000	2018	08	13	23:00	68.6	96.6	0
20180813T230500	2018	08	13	23:05	68.4	96.9	0.01
20180813T231000	2018	08	13	23:10	68.4	97.3	0.03

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180813T231500	2018	08	13	23:15	68.3	97.5	0.01
20180813T232000	2018	08	13	23:20	68.3	97.6	0.01
20180813T232500	2018	08	13	23:25	68.1	98	0
20180813T233000	2018	08	13	23:30	68.2	98.2	0
20180813T233500	2018	08	13	23:35	68.3	98.1	0
20180813T234000	2018	08	13	23:40	68.4	98.2	0
20180813T234500	2018	08	13	23:45	68.5	98.1	0.01
20180813T235000	2018	08	13	23:50	68.5	97.9	0.01
20180813T235500	2018	08	13	23:55	68.5	97.8	0
20180814T000000	2018	08	14	00:00	68.5	97.7	0
20180814T000500	2018	08	14	00:05	68.5	97.6	0
20180814T001000	2018	08	14	00:10	68.5	97.6	0.01
20180814T001500	2018	08	14	00:15	68.6	97.8	0.04
20180814T002000	2018	08	14	00:20	68.5	97.9	0.05
20180814T002500	2018	08	14	00:25	68.5	98.2	0.1
20180814T003000	2018	08	14	00:30	68.5	98.4	0.13
20180814T003500	2018	08	14	00:35	68.4	98.6	0.04
20180814T004000	2018	08	14	00:40	68.3	98.7	0.01
20180814T004500	2018	08	14	00:45	68.3	98.5	0.01
20180814T005000	2018	08	14	00:50	68.3	98.4	0.01
20180814T005500	2018	08	14	00:55	68.2	98.4	0
20180814T010000	2018	08	14	01:00	68.2	98.1	0
20180814T010500	2018	08	14	01:05	68.2	98	0
20180814T011000	2018	08	14	01:10	68.2	98.1	0
20180814T011500	2018	08	14	01:15	68.1	98.3	0
20180814T012000	2018	08	14	01:20	68.2	98.3	0
20180814T012500	2018	08	14	01:25	68.2	98.4	0
20180814T013000	2018	08	14	01:30	68.3	98.4	0
20180814T013500	2018	08	14	01:35	68.4	98.1	0
20180814T014000	2018	08	14	01:40	68.4	97.9	0
20180814T014500	2018	08	14	01:45	68.4	97.9	0
20180814T015000	2018	08	14	01:50	68.5	97.8	0
20180814T015500	2018	08	14	01:55	68.5	97.5	0
20180814T020000	2018	08	14	02:00	68.5	97.4	0
20180814T020500	2018	08	14	02:05	68.4	97.4	0
20180814T021000	2018	08	14	02:10	68.4	97.3	0
20180814T021500	2018	08	14	02:15	68.4	97.2	0
20180814T022000	2018	08	14	02:20	68.4	97.1	0
20180814T022500	2018	08	14	02:25	68.4	97.2	0
20180814T023000	2018	08	14	02:30	68.4	97.3	0
20180814T023500	2018	08	14	02:35	68.4	97.3	0
20180814T024000	2018	08	14	02:40	68.4	97.4	0
20180814T024500	2018	08	14	02:45	68.5	97.2	0
20180814T025000	2018	08	14	02:50	68.5	97.1	0
20180814T025500	2018	08	14	02:55	68.5	97	0
20180814T030000	2018	08	14	03:00	68.6	96.9	0
20180814T030500	2018	08	14	03:05	68.6	96.7	0
20180814T031000	2018	08	14	03:10	68.6	96.3	0
20180814T031500	2018	08	14	03:15	68.6	96.2	0
20180814T032000	2018	08	14	03:20	68.6	96.1	0
20180814T032500	2018	08	14	03:25	68.5	96.4	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180814T033000	2018	08	14	03:30	68.4	96.7	0
20180814T033500	2018	08	14	03:35	68.4	96.6	0
20180814T034000	2018	08	14	03:40	68.3	96.8	0
20180814T034500	2018	08	14	03:45	68.2	97	0
20180814T035000	2018	08	14	03:50	68.2	97	0
20180814T035500	2018	08	14	03:55	68.2	97	0
20180814T040000	2018	08	14	04:00	68.1	97.1	0
20180814T040500	2018	08	14	04:05	68.1	97.1	0
20180814T041000	2018	08	14	04:10	68.1	97.1	0
20180814T041500	2018	08	14	04:15	68.2	96.8	0
20180814T042000	2018	08	14	04:20	68.2	96.7	0
20180814T042500	2018	08	14	04:25	68.1	96.9	0
20180814T043000	2018	08	14	04:30	68.1	97	0
20180814T043500	2018	08	14	04:35	68.2	96.8	0
20180814T044000	2018	08	14	04:40	68.1	96.9	0
20180814T044500	2018	08	14	04:45	68.2	96.9	0
20180814T045000	2018	08	14	04:50	68.2	96.9	0
20180814T045500	2018	08	14	04:55	68.2	96.8	0
20180814T050000	2018	08	14	05:00	68.2	96.7	0
20180814T050500	2018	08	14	05:05	68.3	96.6	0
20180814T051000	2018	08	14	05:10	68.2	96.6	0
20180814T051500	2018	08	14	05:15	68.1	96.9	0
20180814T052000	2018	08	14	05:20	68.1	97.2	0
20180814T052500	2018	08	14	05:25	67.9	97.6	0
20180814T053000	2018	08	14	05:30	67.8	98	0
20180814T053500	2018	08	14	05:35	67.9	98.1	0
20180814T054000	2018	08	14	05:40	67.8	98.1	0
20180814T054500	2018	08	14	05:45	67.7	98.1	0
20180814T055000	2018	08	14	05:50	67.7	98.1	0
20180814T055500	2018	08	14	05:55	67.8	98.1	0
20180814T060000	2018	08	14	06:00	67.7	98	0
20180814T060500	2018	08	14	06:05	67.8	98	0
20180814T061000	2018	08	14	06:10	67.8	97.8	0
20180814T061500	2018	08	14	06:15	67.8	97.9	0
20180814T062000	2018	08	14	06:20	67.9	97.9	0
20180814T062500	2018	08	14	06:25	68	97.9	0
20180814T063000	2018	08	14	06:30	68	97.9	0
20180814T063500	2018	08	14	06:35	68	97.9	0
20180814T064000	2018	08	14	06:40	68	98.1	0
20180814T064500	2018	08	14	06:45	68	98.3	0
20180814T065000	2018	08	14	06:50	68.1	98.2	0
20180814T065500	2018	08	14	06:55	68.1	98.2	0
20180814T070000	2018	08	14	07:00	68.1	98.3	0.01
20180814T070500	2018	08	14	07:05	68.1	98.5	0
20180814T071000	2018	08	14	07:10	68.3	98.5	0
20180814T071500	2018	08	14	07:15	68.3	98.4	0
20180814T072000	2018	08	14	07:20	68.3	98.3	0
20180814T072500	2018	08	14	07:25	68.5	98.2	0
20180814T073000	2018	08	14	07:30	68.6	98.1	0
20180814T073500	2018	08	14	07:35	68.6	97.9	0
20180814T074000	2018	08	14	07:40	68.6	97.9	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180814T074500	2018	08	14	07:45	68.5	98.1	0
20180814T075000	2018	08	14	07:50	68.6	98.3	0
20180814T075500	2018	08	14	07:55	68.7	98.3	0
20180814T080000	2018	08	14	08:00	68.7	98.4	0
20180814T080500	2018	08	14	08:05	68.9	98.3	0
20180814T081000	2018	08	14	08:10	69.2	97.8	0
20180814T081500	2018	08	14	08:15	69.2	97.1	0
20180814T082000	2018	08	14	08:20	69.2	97.1	0
20180814T082500	2018	08	14	08:25	69.4	97.1	0
20180814T083000	2018	08	14	08:30	69.6	97	0
20180814T083500	2018	08	14	08:35	69.6	96.7	0
20180814T084000	2018	08	14	08:40	69.7	96.8	0
20180814T084500	2018	08	14	08:45	69.9	96.2	0
20180814T085000	2018	08	14	08:50	70.4	96.4	0
20180814T085500	2018	08	14	08:55	70.4	95.6	0
20180814T090000	2018	08	14	09:00	71	95.3	0
20180814T090500	2018	08	14	09:05	71	94.1	0
20180814T091000	2018	08	14	09:10	70.9	93.4	0
20180814T091500	2018	08	14	09:15	71.2	93.2	0
20180814T092000	2018	08	14	09:20	71.9	91.9	0
20180814T092500	2018	08	14	09:25	71.8	91.5	0
20180814T093000	2018	08	14	09:30	72.6	91.5	0
20180814T093500	2018	08	14	09:35	73.3	90.6	0
20180814T094000	2018	08	14	09:40	73.7	87.9	0
20180814T094500	2018	08	14	09:45	73.5	87.5	0
20180814T095000	2018	08	14	09:50	73.8	86.9	0
20180814T095500	2018	08	14	09:55	73.7	86.5	0
20180814T100000	2018	08	14	10:00	73.5	86.4	0
20180814T100500	2018	08	14	10:05	73.8	85	0
20180814T101000	2018	08	14	10:10	74.1	86.2	0
20180814T101500	2018	08	14	10:15	74.1	85.8	0
20180814T102000	2018	08	14	10:20	74.4	84.9	0
20180814T102500	2018	08	14	10:25	74.1	84.6	0
20180814T103000	2018	08	14	10:30	73.7	85.7	0
20180814T103500	2018	08	14	10:35	73.2	85.8	0
20180814T104000	2018	08	14	10:40	74	85.6	0
20180814T104500	2018	08	14	10:45	73.9	84.2	0
20180814T105000	2018	08	14	10:50	73.6	86.1	0
20180814T105500	2018	08	14	10:55	74.1	84.4	0
20180814T110000	2018	08	14	11:00	74.8	82.5	0
20180814T110500	2018	08	14	11:05	75.2	82.5	0
20180814T111000	2018	08	14	11:10	75	82.4	0
20180814T111500	2018	08	14	11:15	74.5	82.6	0
20180814T112000	2018	08	14	11:20	74.6	81.6	0
20180814T112500	2018	08	14	11:25	75.1	82.4	0
20180814T113000	2018	08	14	11:30	76.4	80	0
20180814T113500	2018	08	14	11:35	76.3	79.5	0
20180814T114000	2018	08	14	11:40	75.9	79.3	0
20180814T114500	2018	08	14	11:45	75.3	80.2	0
20180814T115000	2018	08	14	11:50	77	80.1	0
20180814T115500	2018	08	14	11:55	76.7	79.3	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180814T120000	2018	08	14	12:00	76.5	79.1	0
20180814T120500	2018	08	14	12:05	77.5	79.3	0
20180814T121000	2018	08	14	12:10	77.2	77.5	0
20180814T121500	2018	08	14	12:15	78.2	75.6	0
20180814T122000	2018	08	14	12:20	78.1	75	0
20180814T122500	2018	08	14	12:25	77.9	74.7	0
20180814T123000	2018	08	14	12:30	77	75.5	0
20180814T123500	2018	08	14	12:35	77.9	75.7	0
20180814T124000	2018	08	14	12:40	78.9	75.9	0
20180814T124500	2018	08	14	12:45	78.9	74.9	0
20180814T125000	2018	08	14	12:50	78.9	74.7	0
20180814T125500	2018	08	14	12:55	78	75.8	0
20180814T130000	2018	08	14	13:00	78.3	75	0
20180814T130500	2018	08	14	13:05	78	75.4	0
20180814T131000	2018	08	14	13:10	78.7	73.7	0
20180814T131500	2018	08	14	13:15	78	72.6	0
20180814T132000	2018	08	14	13:20	79.3	71.9	0
20180814T132500	2018	08	14	13:25	79.1	71.3	0
20180814T133000	2018	08	14	13:30	79.5	70.8	0
20180814T133500	2018	08	14	13:35	78.2	71.2	0
20180814T134000	2018	08	14	13:40	80.1	70.3	0
20180814T134500	2018	08	14	13:45	79.7	68.5	0
20180814T135000	2018	08	14	13:50	79.2	69.8	0
20180814T135500	2018	08	14	13:55	79.1	70.5	0
20180814T140000	2018	08	14	14:00	79.6	69.9	0
20180814T140500	2018	08	14	14:05	78.5	68.7	0
20180814T141000	2018	08	14	14:10	74.5	74.6	0
20180814T141500	2018	08	14	14:15	72.5	80.1	0
20180814T142000	2018	08	14	14:20	71.9	80.4	0
20180814T142500	2018	08	14	14:25	72.3	80.4	0
20180814T143000	2018	08	14	14:30	72.1	78.8	0
20180814T143500	2018	08	14	14:35	71.7	80	0
20180814T144000	2018	08	14	14:40	70.9	81.5	0
20180814T144500	2018	08	14	14:45	70.8	81.9	0
20180814T145000	2018	08	14	14:50	70.3	83.7	0.03
20180814T145500	2018	08	14	14:55	69	88.2	0.02
20180814T150000	2018	08	14	15:00	68.4	91.9	0.05
20180814T150500	2018	08	14	15:05	68.1	94.3	0
20180814T151000	2018	08	14	15:10	68.1	94.2	0
20180814T151500	2018	08	14	15:15	68.3	92.5	0
20180814T152000	2018	08	14	15:20	68.3	91.9	0
20180814T152500	2018	08	14	15:25	68.7	92.7	0
20180814T153000	2018	08	14	15:30	68.6	93.9	0
20180814T153500	2018	08	14	15:35	68.3	94.9	0
20180814T154000	2018	08	14	15:40	68.5	95.6	0
20180814T154500	2018	08	14	15:45	68.5	95.6	0
20180814T155000	2018	08	14	15:50	68.7	95.6	0
20180814T155500	2018	08	14	15:55	68.7	95.6	0
20180814T160000	2018	08	14	16:00	68.3	95.4	0
20180814T160500	2018	08	14	16:05	68.2	95.7	0
20180814T161000	2018	08	14	16:10	68.3	94.7	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180814T161500	2018	08	14	16:15	68.5	93.7	0
20180814T162000	2018	08	14	16:20	68.9	93.5	0
20180814T162500	2018	08	14	16:25	69.4	92.8	0
20180814T163000	2018	08	14	16:30	69.8	91.2	0
20180814T163500	2018	08	14	16:35	70.1	90	0
20180814T164000	2018	08	14	16:40	70.1	91.2	0
20180814T164500	2018	08	14	16:45	70.4	90.9	0
20180814T165000	2018	08	14	16:50	70.8	90.7	0
20180814T165500	2018	08	14	16:55	71.2	88	0
20180814T170000	2018	08	14	17:00	71.2	88.2	0
20180814T170500	2018	08	14	17:05	71.5	88.2	0
20180814T171000	2018	08	14	17:10	72.2	83.7	0
20180814T171500	2018	08	14	17:15	72.4	79	0
20180814T172000	2018	08	14	17:20	72.1	81.2	0
20180814T172500	2018	08	14	17:25	72.5	82.6	0
20180814T173000	2018	08	14	17:30	73.3	77.1	0
20180814T173500	2018	08	14	17:35	72.5	80.3	0
20180814T174000	2018	08	14	17:40	70.7	88.9	0
20180814T174500	2018	08	14	17:45	70.5	90.9	0
20180814T175000	2018	08	14	17:50	70.7	89.8	0
20180814T175500	2018	08	14	17:55	71.9	88.8	0
20180814T180000	2018	08	14	18:00	72.1	86	0
20180814T180500	2018	08	14	18:05	72.1	86.6	0
20180814T181000	2018	08	14	18:10	72.1	86.8	0
20180814T181500	2018	08	14	18:15	72	86.1	0
20180814T182000	2018	08	14	18:20	71.9	86.4	0
20180814T182500	2018	08	14	18:25	71.8	87.5	0
20180814T183000	2018	08	14	18:30	71.2	89.3	0
20180814T183500	2018	08	14	18:35	70.9	89.1	0
20180814T184000	2018	08	14	18:40	70.4	92.1	0
20180814T184500	2018	08	14	18:45	69.8	92.2	0
20180814T185000	2018	08	14	18:50	69.5	93.1	0
20180814T185500	2018	08	14	18:55	69	95.2	0
20180814T190000	2018	08	14	19:00	69.4	94.5	0
20180814T190500	2018	08	14	19:05	69.2	93.5	0
20180814T191000	2018	08	14	19:10	69	92.7	0
20180814T191500	2018	08	14	19:15	68.7	93	0
20180814T192000	2018	08	14	19:20	68.5	93.6	0
20180814T192500	2018	08	14	19:25	68.3	94.7	0
20180814T193000	2018	08	14	19:30	67.9	95.5	0
20180814T193500	2018	08	14	19:35	67.9	95.8	0
20180814T194000	2018	08	14	19:40	67.7	95.8	0
20180814T194500	2018	08	14	19:45	67.4	95.7	0
20180814T195000	2018	08	14	19:50	67.2	95.8	0
20180814T195500	2018	08	14	19:55	67	96.6	0
20180814T200000	2018	08	14	20:00	66.9	96.6	0
20180814T200500	2018	08	14	20:05	67.1	96.9	0
20180814T201000	2018	08	14	20:10	67	96.9	0
20180814T201500	2018	08	14	20:15	66.8	97	0
20180814T202000	2018	08	14	20:20	66.9	97.2	0
20180814T202500	2018	08	14	20:25	65.2	96.2	0

Table C-1: Summer SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180814T203000	2018	08	14	20:30	65	98	0
20180814T203500	2018	08	14	20:35	65	98.2	0
20180814T204000	2018	08	14	20:40	64.8	98.3	0
20180814T204500	2018	08	14	20:45	65.3	98.9	0
20180814T205000	2018	08	14	20:50	64.6	98.5	0
20180814T205500	2018	08	14	20:55	64.5	98.6	0
20180814T210000	2018	08	14	21:00	64.9	99.1	0
20180814T210500	2018	08	14	21:05	64.9	99.2	0
20180814T211000	2018	08	14	21:10	65.7	99.6	0
20180814T211500	2018	08	14	21:15	66.4	99.4	0
20180814T212000	2018	08	14	21:20	66.6	98.7	0
20180814T212500	2018	08	14	21:25	66.4	98.1	0
20180814T213000	2018	08	14	21:30	66.2	98.1	0
20180814T213500	2018	08	14	21:35	66.3	98.2	0
20180814T214000	2018	08	14	21:40	66.2	98.2	0
20180814T214500	2018	08	14	21:45	65.9	97.9	0
20180814T215000	2018	08	14	21:50	65.5	98	0
20180814T215500	2018	08	14	21:55	65.1	98.2	0
20180814T220000	2018	08	14	22:00	65	98.5	0
20180814T220500	2018	08	14	22:05	64.7	98.5	0
20180814T221000	2018	08	14	22:10	64.5	98.7	0
20180814T221500	2018	08	14	22:15	64.2	98.6	0
20180814T222000	2018	08	14	22:20	63.8	98.8	0
20180814T222500	2018	08	14	22:25	64.1	98.9	0
20180814T223000	2018	08	14	22:30	63.6	99.1	0
20180814T223500	2018	08	14	22:35	63.8	99.2	0
20180814T224000	2018	08	14	22:40	64.2	99.2	0
20180814T224500	2018	08	14	22:45	64.5	99.4	0
20180814T225000	2018	08	14	22:50	63.1	99.1	0
20180814T225500	2018	08	14	22:55	62.7	99.2	0
20180814T230000	2018	08	14	23:00	63	99.3	0
20180814T230500	2018	08	14	23:05	62.8	99.4	0
20180814T231000	2018	08	14	23:10	62.7	99.4	0
20180814T231500	2018	08	14	23:15	62.2	99.4	0
20180814T232000	2018	08	14	23:20	61.9	99.3	0
20180814T232500	2018	08	14	23:25	62.2	99.4	0
20180814T233000	2018	08	14	23:30	62.1	99.5	0
20180814T233500	2018	08	14	23:35	62.1	99.5	0
20180814T234000	2018	08	14	23:40	62.4	99.6	0
20180814T234500	2018	08	14	23:45	62.5	99.7	0
20180814T235000	2018	08	14	23:50	62.6	99.7	0
20180814T235500	2018	08	14	23:55	62.6	99.7	0
20180815T000000	2018	08	15	00:00	63.6	99.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180416T000000	2018	04	16	00:00	29.8	96.4	0
20180416T000500	2018	04	16	00:05	29.8	96.5	0
20180416T001000	2018	04	16	00:10	29.8	96.5	0
20180416T001500	2018	04	16	00:15	29.8	96.1	0
20180416T002000	2018	04	16	00:20	29.8	95.9	0
20180416T002500	2018	04	16	00:25	29.8	96	0
20180416T003000	2018	04	16	00:30	29.8	96	0
20180416T003500	2018	04	16	00:35	29.8	95.7	0
20180416T004000	2018	04	16	00:40	29.8	95.6	0
20180416T004500	2018	04	16	00:45	29.8	95.7	0
20180416T005000	2018	04	16	00:50	29.7	95.5	0
20180416T005500	2018	04	16	00:55	29.8	95.7	0
20180416T010000	2018	04	16	01:00	29.7	95.8	0
20180416T010500	2018	04	16	01:05	29.7	96	0
20180416T011000	2018	04	16	01:10	29.7	95.6	0
20180416T011500	2018	04	16	01:15	29.7	95.3	0
20180416T012000	2018	04	16	01:20	29.9	95.5	0
20180416T012500	2018	04	16	01:25	29.9	95.1	0
20180416T013000	2018	04	16	01:30	29.9	95.4	0
20180416T013500	2018	04	16	01:35	29.8	96	0
20180416T014000	2018	04	16	01:40	29.7	96.2	0
20180416T014500	2018	04	16	01:45	29.7	96.3	0
20180416T015000	2018	04	16	01:50	29.7	96.1	0
20180416T015500	2018	04	16	01:55	29.7	96.1	0
20180416T020000	2018	04	16	02:00	29.7	95.8	0
20180416T020500	2018	04	16	02:05	29.7	95.7	0
20180416T021000	2018	04	16	02:10	29.7	95.7	0
20180416T021500	2018	04	16	02:15	29.7	95.8	0
20180416T022000	2018	04	16	02:20	29.7	95.9	0
20180416T022500	2018	04	16	02:25	29.8	96.2	0
20180416T023000	2018	04	16	02:30	29.8	96.3	0
20180416T023500	2018	04	16	02:35	29.8	96.2	0
20180416T024000	2018	04	16	02:40	29.9	96.4	0
20180416T024500	2018	04	16	02:45	29.9	96.5	0
20180416T025000	2018	04	16	02:50	30.2	96.7	0
20180416T025500	2018	04	16	02:55	30.2	96.7	0
20180416T030000	2018	04	16	03:00	30.2	96.4	0
20180416T030500	2018	04	16	03:05	30.3	96.2	0
20180416T031000	2018	04	16	03:10	30.3	96.3	0
20180416T031500	2018	04	16	03:15	30.2	95.9	0
20180416T032000	2018	04	16	03:20	30.3	95.8	0
20180416T032500	2018	04	16	03:25	30.3	95.6	0
20180416T033000	2018	04	16	03:30	30.5	96	0
20180416T033500	2018	04	16	03:35	30.4	95.8	0
20180416T034000	2018	04	16	03:40	30.4	95.7	0
20180416T034500	2018	04	16	03:45	30.4	95.7	0
20180416T035000	2018	04	16	03:50	30.4	95.5	0
20180416T035500	2018	04	16	03:55	30.5	95.1	0
20180416T040000	2018	04	16	04:00	30.5	95	0
20180416T040500	2018	04	16	04:05	30.6	94.9	0
20180416T041000	2018	04	16	04:10	30.6	94.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180416T041500	2018	04	16	04:15	30.5	94.8	0
20180416T042000	2018	04	16	04:20	30.5	94.8	0
20180416T042500	2018	04	16	04:25	30.5	94.7	0
20180416T043000	2018	04	16	04:30	30.6	94.2	0
20180416T043500	2018	04	16	04:35	30.6	94.5	0
20180416T044000	2018	04	16	04:40	30.6	94.8	0
20180416T044500	2018	04	16	04:45	30.6	95	0
20180416T045000	2018	04	16	04:50	30.5	95.1	0
20180416T045500	2018	04	16	04:55	30.5	95.5	0
20180416T050000	2018	04	16	05:00	30.6	95.2	0
20180416T050500	2018	04	16	05:05	30.7	95.1	0
20180416T051000	2018	04	16	05:10	30.7	95	0
20180416T051500	2018	04	16	05:15	30.8	94.8	0
20180416T052000	2018	04	16	05:20	30.9	94.1	0
20180416T052500	2018	04	16	05:25	31	93.7	0
20180416T053000	2018	04	16	05:30	31	93.7	0
20180416T053500	2018	04	16	05:35	31	93.5	0
20180416T054000	2018	04	16	05:40	31.1	93	0
20180416T054500	2018	04	16	05:45	31.3	92.7	0
20180416T055000	2018	04	16	05:50	31.5	92.9	0
20180416T055500	2018	04	16	05:55	31.4	92.8	0
20180416T060000	2018	04	16	06:00	31.4	92.9	0
20180416T060500	2018	04	16	06:05	31.4	92.4	0
20180416T061000	2018	04	16	06:10	31.5	92.3	0
20180416T061500	2018	04	16	06:15	31.7	92.1	0
20180416T062000	2018	04	16	06:20	31.8	91.4	0
20180416T062500	2018	04	16	06:25	31.9	91.6	0
20180416T063000	2018	04	16	06:30	32	91.3	0
20180416T063500	2018	04	16	06:35	32	91.5	0
20180416T064000	2018	04	16	06:40	32	91.8	0
20180416T064500	2018	04	16	06:45	32.2	90.6	0
20180416T065000	2018	04	16	06:50	32.3	90.6	0
20180416T065500	2018	04	16	06:55	32.3	90.4	0
20180416T070000	2018	04	16	07:00	32.5	89.9	0
20180416T070500	2018	04	16	07:05	32.6	89.6	0
20180416T071000	2018	04	16	07:10	32.6	89.8	0
20180416T071500	2018	04	16	07:15	32.8	89.1	0
20180416T072000	2018	04	16	07:20	32.8	89.1	0
20180416T072500	2018	04	16	07:25	32.9	88.9	0
20180416T073000	2018	04	16	07:30	33	88.3	0
20180416T073500	2018	04	16	07:35	33	89.4	0
20180416T074000	2018	04	16	07:40	32.9	89.5	0.01
20180416T074500	2018	04	16	07:45	33	90.1	0
20180416T075000	2018	04	16	07:50	33	90.2	0
20180416T075500	2018	04	16	07:55	33.1	89.9	0
20180416T080000	2018	04	16	08:00	33.1	90	0
20180416T080500	2018	04	16	08:05	33.1	89.7	0
20180416T081000	2018	04	16	08:10	33.2	89.8	0
20180416T081500	2018	04	16	08:15	33.2	89.6	0
20180416T082000	2018	04	16	08:20	33.1	90.4	0
20180416T082500	2018	04	16	08:25	33.3	90	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180416T083000	2018	04	16	08:30	33.2	90.7	0
20180416T083500	2018	04	16	08:35	33.2	90.9	0
20180416T084000	2018	04	16	08:40	33.3	90.8	0
20180416T084500	2018	04	16	08:45	33.3	90.6	0
20180416T085000	2018	04	16	08:50	33.3	91	0
20180416T085500	2018	04	16	08:55	33.4	90.8	0
20180416T090000	2018	04	16	09:00	33.4	90.3	0
20180416T090500	2018	04	16	09:05	33.4	90.7	0
20180416T091000	2018	04	16	09:10	33.4	91	0
20180416T091500	2018	04	16	09:15	33.4	91.1	0
20180416T092000	2018	04	16	09:20	33.3	91.7	0
20180416T092500	2018	04	16	09:25	33.5	91.6	0
20180416T093000	2018	04	16	09:30	33.6	90.6	0
20180416T093500	2018	04	16	09:35	33.7	90.8	0
20180416T094000	2018	04	16	09:40	33.8	90.4	0
20180416T094500	2018	04	16	09:45	33.9	90.4	0
20180416T095000	2018	04	16	09:50	34.1	89.7	0
20180416T095500	2018	04	16	09:55	34.2	89.7	0
20180416T100000	2018	04	16	10:00	34.2	89.9	0
20180416T100500	2018	04	16	10:05	34.4	89.5	0
20180416T101000	2018	04	16	10:10	34.4	89.5	0
20180416T101500	2018	04	16	10:15	34.3	90.8	0
20180416T102000	2018	04	16	10:20	34.5	90.4	0
20180416T102500	2018	04	16	10:25	34.7	90.1	0
20180416T103000	2018	04	16	10:30	34.8	90	0.01
20180416T103500	2018	04	16	10:35	35	90.2	0.01
20180416T104000	2018	04	16	10:40	34.9	91.5	0.01
20180416T104500	2018	04	16	10:45	34.8	92.7	0.02
20180416T105000	2018	04	16	10:50	34.8	93.1	0.02
20180416T105500	2018	04	16	10:55	34.9	93.3	0.02
20180416T110000	2018	04	16	11:00	35	93.5	0.01
20180416T110500	2018	04	16	11:05	35	93.5	0.01
20180416T111000	2018	04	16	11:10	35.1	93.7	0.01
20180416T111500	2018	04	16	11:15	35.4	93.5	0.01
20180416T112000	2018	04	16	11:20	35.4	93.9	0.01
20180416T112500	2018	04	16	11:25	35.6	94.1	0.01
20180416T113000	2018	04	16	11:30	35.7	94.1	0.01
20180416T113500	2018	04	16	11:35	35.8	94.1	0.01
20180416T114000	2018	04	16	11:40	36	94.5	0.01
20180416T114500	2018	04	16	11:45	36.1	94.7	0.01
20180416T115000	2018	04	16	11:50	36.3	94.1	0.01
20180416T115500	2018	04	16	11:55	36.4	94.4	0.01
20180416T120000	2018	04	16	12:00	36.6	94.5	0
20180416T120500	2018	04	16	12:05	36.8	94	0.01
20180416T121000	2018	04	16	12:10	36.9	94.2	0.01
20180416T121500	2018	04	16	12:15	37.1	94.2	0.01
20180416T122000	2018	04	16	12:20	37.3	94.1	0
20180416T122500	2018	04	16	12:25	37.5	94	0
20180416T123000	2018	04	16	12:30	37.6	93.8	0.01
20180416T123500	2018	04	16	12:35	37.9	94	0.01
20180416T124000	2018	04	16	12:40	38	93.9	0.01

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180416T124500	2018	04	16	12:45	37.8	93.7	0.01
20180416T125000	2018	04	16	12:50	37.8	94.1	0.01
20180416T125500	2018	04	16	12:55	37.8	94.2	0.01
20180416T130000	2018	04	16	13:00	37.8	94.4	0.01
20180416T130500	2018	04	16	13:05	37.9	94.5	0.01
20180416T131000	2018	04	16	13:10	38	94.7	0.01
20180416T131500	2018	04	16	13:15	38.1	94.1	0.01
20180416T132000	2018	04	16	13:20	38.1	94.1	0.01
20180416T132500	2018	04	16	13:25	38.2	93.7	0.01
20180416T133000	2018	04	16	13:30	38.3	93.5	0.01
20180416T133500	2018	04	16	13:35	38.3	94.3	0.02
20180416T134000	2018	04	16	13:40	38.2	94.7	0.01
20180416T134500	2018	04	16	13:45	38.3	94.5	0.01
20180416T135000	2018	04	16	13:50	38.4	94.4	0
20180416T135500	2018	04	16	13:55	38.6	94	0
20180416T140000	2018	04	16	14:00	38.7	93.6	0
20180416T140500	2018	04	16	14:05	39	93.3	0
20180416T141000	2018	04	16	14:10	39.3	92.8	0
20180416T141500	2018	04	16	14:15	39.7	91.8	0
20180416T142000	2018	04	16	14:20	39.8	92.5	0.01
20180416T142500	2018	04	16	14:25	39.8	93.9	0.01
20180416T143000	2018	04	16	14:30	39.6	93.7	0
20180416T143500	2018	04	16	14:35	39.6	93.8	0
20180416T144000	2018	04	16	14:40	39.6	94	0
20180416T144500	2018	04	16	14:45	39.6	94	0
20180416T145000	2018	04	16	14:50	39.9	94.2	0.01
20180416T145500	2018	04	16	14:55	39.9	94.1	0
20180416T150000	2018	04	16	15:00	40	93.9	0
20180416T150500	2018	04	16	15:05	40.2	94	0
20180416T151000	2018	04	16	15:10	40.2	94	0
20180416T151500	2018	04	16	15:15	40.2	94.4	0
20180416T152000	2018	04	16	15:20	40.3	94.5	0
20180416T152500	2018	04	16	15:25	40.4	94.9	0
20180416T153000	2018	04	16	15:30	40.5	95.6	0
20180416T153500	2018	04	16	15:35	40.9	96.8	0
20180416T154000	2018	04	16	15:40	41.4	97.4	0
20180416T154500	2018	04	16	15:45	41.5	97	0
20180416T155000	2018	04	16	15:50	42	96.7	0
20180416T155500	2018	04	16	15:55	41.7	95.8	0
20180416T160000	2018	04	16	16:00	41.4	95.3	0
20180416T160500	2018	04	16	16:05	41.4	95.2	0
20180416T161000	2018	04	16	16:10	41.6	95.2	0
20180416T161500	2018	04	16	16:15	41.7	94.8	0
20180416T162000	2018	04	16	16:20	41.9	94.5	0
20180416T162500	2018	04	16	16:25	41.9	93.6	0
20180416T163000	2018	04	16	16:30	42	93.5	0
20180416T163500	2018	04	16	16:35	42	93.2	0
20180416T164000	2018	04	16	16:40	42	93.8	0
20180416T164500	2018	04	16	16:45	42	94	0
20180416T165000	2018	04	16	16:50	42.1	93.7	0
20180416T165500	2018	04	16	16:55	42.2	93.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180416T170000	2018	04	16	17:00	42.2	93.6	0
20180416T170500	2018	04	16	17:05	42.4	93.4	0
20180416T171000	2018	04	16	17:10	42.5	92.9	0
20180416T171500	2018	04	16	17:15	42.5	92.9	0
20180416T172000	2018	04	16	17:20	42.3	94.1	0
20180416T172500	2018	04	16	17:25	42.2	94.6	0
20180416T173000	2018	04	16	17:30	42.2	94.6	0
20180416T173500	2018	04	16	17:35	42.2	95.4	0
20180416T174000	2018	04	16	17:40	42.2	95.1	0
20180416T174500	2018	04	16	17:45	42.3	94.8	0
20180416T175000	2018	04	16	17:50	42.3	94.8	0
20180416T175500	2018	04	16	17:55	42.4	95.2	0
20180416T180000	2018	04	16	18:00	42.3	95.3	0
20180416T180500	2018	04	16	18:05	42.1	95.3	0
20180416T181000	2018	04	16	18:10	42	95.7	0
20180416T181500	2018	04	16	18:15	41.8	95.8	0
20180416T182000	2018	04	16	18:20	41.6	96	0
20180416T182500	2018	04	16	18:25	41.6	96	0
20180416T183000	2018	04	16	18:30	41.5	96.2	0
20180416T183500	2018	04	16	18:35	41.5	96.5	0
20180416T184000	2018	04	16	18:40	41.4	96.6	0
20180416T184500	2018	04	16	18:45	41.3	96.6	0
20180416T185000	2018	04	16	18:50	41.4	96.6	0
20180416T185500	2018	04	16	18:55	41.3	96.7	0
20180416T190000	2018	04	16	19:00	41.3	96.3	0
20180416T190500	2018	04	16	19:05	41.3	96	0
20180416T191000	2018	04	16	19:10	41.5	95.8	0
20180416T191500	2018	04	16	19:15	41.6	95.4	0
20180416T192000	2018	04	16	19:20	41.7	94.9	0
20180416T192500	2018	04	16	19:25	41.8	94.1	0
20180416T193000	2018	04	16	19:30	41.8	93.9	0
20180416T193500	2018	04	16	19:35	41.8	93.7	0
20180416T194000	2018	04	16	19:40	41.7	93.9	0
20180416T194500	2018	04	16	19:45	41.6	94	0
20180416T195000	2018	04	16	19:50	41.6	94	0
20180416T195500	2018	04	16	19:55	41.5	93.9	0
20180416T200000	2018	04	16	20:00	41.5	94.1	0
20180416T200500	2018	04	16	20:05	41.6	93.8	0
20180416T201000	2018	04	16	20:10	41.8	93.2	0
20180416T201500	2018	04	16	20:15	41.6	93.1	0
20180416T202000	2018	04	16	20:20	41.3	94	0
20180416T202500	2018	04	16	20:25	41.3	93.7	0
20180416T203000	2018	04	16	20:30	41.3	93.4	0
20180416T203500	2018	04	16	20:35	41.3	93.2	0
20180416T204000	2018	04	16	20:40	41.2	93.7	0
20180416T204500	2018	04	16	20:45	41.2	94.2	0.01
20180416T205000	2018	04	16	20:50	41.1	95.2	0.01
20180416T205500	2018	04	16	20:55	41.2	96.8	0.01
20180416T210000	2018	04	16	21:00	41.3	97.5	0.01
20180416T210500	2018	04	16	21:05	41.2	97.8	0
20180416T211000	2018	04	16	21:10	41.1	98.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180416T211500	2018	04	16	21:15	41.2	98.2	0
20180416T212000	2018	04	16	21:20	41.4	98.3	0
20180416T212500	2018	04	16	21:25	41.5	98.3	0
20180416T213000	2018	04	16	21:30	41.5	99.7	0
20180416T213500	2018	04	16	21:35	40.6	96.9	0.01
20180416T214000	2018	04	16	21:40	39.8	94.8	0
20180416T214500	2018	04	16	21:45	39.1	93.4	0
20180416T215000	2018	04	16	21:50	38.5	93.5	0
20180416T215500	2018	04	16	21:55	37.8	92.6	0
20180416T220000	2018	04	16	22:00	37.5	92.8	0
20180416T220500	2018	04	16	22:05	37.2	92.2	0
20180416T221000	2018	04	16	22:10	37.1	91.7	0
20180416T221500	2018	04	16	22:15	37	91.6	0
20180416T222000	2018	04	16	22:20	36.9	91.5	0
20180416T222500	2018	04	16	22:25	36.7	91.8	0
20180416T223000	2018	04	16	22:30	36.5	91.8	0
20180416T223500	2018	04	16	22:35	36.4	91.6	0
20180416T224000	2018	04	16	22:40	36.3	91.8	0
20180416T224500	2018	04	16	22:45	36.2	91.7	0
20180416T225000	2018	04	16	22:50	36.1	91.6	0
20180416T225500	2018	04	16	22:55	36	92.2	0
20180416T230000	2018	04	16	23:00	35.9	92.1	0
20180416T230500	2018	04	16	23:05	35.8	92.1	0
20180416T231000	2018	04	16	23:10	35.8	91.8	0
20180416T231500	2018	04	16	23:15	35.7	91.9	0
20180416T232000	2018	04	16	23:20	35.8	91.5	0
20180416T232500	2018	04	16	23:25	35.8	91.3	0
20180416T233000	2018	04	16	23:30	35.8	91.5	0
20180416T233500	2018	04	16	23:35	35.7	92.2	0
20180416T234000	2018	04	16	23:40	35.7	92.8	0
20180416T234500	2018	04	16	23:45	35.6	93.3	0
20180416T235000	2018	04	16	23:50	35.5	93.4	0
20180416T235500	2018	04	16	23:55	35.5	93.4	0
20180417T000000	2018	04	17	00:00	35.4	93.5	0
20180417T000500	2018	04	17	00:05	35.4	93.2	0
20180417T001000	2018	04	17	00:10	35.5	92.3	0
20180417T001500	2018	04	17	00:15	35.5	91.9	0
20180417T002000	2018	04	17	00:20	35.5	92.4	0
20180417T002500	2018	04	17	00:25	35.4	93	0
20180417T003000	2018	04	17	00:30	35.4	93.4	0
20180417T003500	2018	04	17	00:35	35.4	92.9	0
20180417T004000	2018	04	17	00:40	35.3	93.2	0
20180417T004500	2018	04	17	00:45	35.3	92.4	0
20180417T005000	2018	04	17	00:50	35.4	90.9	0
20180417T005500	2018	04	17	00:55	35.4	91	0
20180417T010000	2018	04	17	01:00	35.3	91.1	0
20180417T010500	2018	04	17	01:05	35.2	91.3	0
20180417T011000	2018	04	17	01:10	35.2	90.9	0
20180417T011500	2018	04	17	01:15	35.1	91.2	0
20180417T012000	2018	04	17	01:20	35.1	90.6	0
20180417T012500	2018	04	17	01:25	35.1	90	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180417T013000	2018	04	17	01:30	35.1	89.9	0
20180417T013500	2018	04	17	01:35	35.1	89.7	0
20180417T014000	2018	04	17	01:40	35.1	89.6	0
20180417T014500	2018	04	17	01:45	35.1	89.5	0
20180417T015000	2018	04	17	01:50	35	89.8	0
20180417T015500	2018	04	17	01:55	35.1	89.4	0
20180417T020000	2018	04	17	02:00	35.1	88.8	0
20180417T020500	2018	04	17	02:05	35.1	89	0
20180417T021000	2018	04	17	02:10	35	89	0
20180417T021500	2018	04	17	02:15	35	89.1	0
20180417T022000	2018	04	17	02:20	35	88.6	0
20180417T022500	2018	04	17	02:25	35	89	0
20180417T023000	2018	04	17	02:30	35	89	0
20180417T023500	2018	04	17	02:35	35	89	0
20180417T024000	2018	04	17	02:40	34.9	89.3	0
20180417T024500	2018	04	17	02:45	34.9	88.9	0
20180417T025000	2018	04	17	02:50	35	88.1	0
20180417T025500	2018	04	17	02:55	35	87.6	0
20180417T030000	2018	04	17	03:00	35	88	0
20180417T030500	2018	04	17	03:05	34.9	88	0
20180417T031000	2018	04	17	03:10	34.9	88.1	0
20180417T031500	2018	04	17	03:15	34.9	87.7	0
20180417T032000	2018	04	17	03:20	34.9	87.3	0
20180417T032500	2018	04	17	03:25	35	86.2	0
20180417T033000	2018	04	17	03:30	35	86.1	0
20180417T033500	2018	04	17	03:35	35	85.9	0
20180417T034000	2018	04	17	03:40	35	86	0
20180417T034500	2018	04	17	03:45	35	86	0
20180417T035000	2018	04	17	03:50	34.9	86.5	0
20180417T035500	2018	04	17	03:55	34.8	86.9	0
20180417T040000	2018	04	17	04:00	34.8	86.9	0
20180417T040500	2018	04	17	04:05	34.9	86.4	0
20180417T041000	2018	04	17	04:10	34.9	85.8	0
20180417T041500	2018	04	17	04:15	34.9	85.9	0
20180417T042000	2018	04	17	04:20	34.9	85.4	0
20180417T042500	2018	04	17	04:25	34.9	85.6	0
20180417T043000	2018	04	17	04:30	34.8	86.5	0
20180417T043500	2018	04	17	04:35	34.9	85.2	0
20180417T044000	2018	04	17	04:40	34.8	85.7	0
20180417T044500	2018	04	17	04:45	34.8	85.6	0
20180417T045000	2018	04	17	04:50	34.8	85.2	0
20180417T045500	2018	04	17	04:55	34.8	85.1	0
20180417T050000	2018	04	17	05:00	34.7	85.5	0
20180417T050500	2018	04	17	05:05	34.7	85	0
20180417T051000	2018	04	17	05:10	34.7	85.4	0
20180417T051500	2018	04	17	05:15	34.8	84.8	0
20180417T052000	2018	04	17	05:20	34.7	85	0
20180417T052500	2018	04	17	05:25	34.6	85.4	0
20180417T053000	2018	04	17	05:30	34.7	85.3	0
20180417T053500	2018	04	17	05:35	34.6	85.4	0
20180417T054000	2018	04	17	05:40	34.6	85.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180417T054500	2018	04	17	05:45	34.5	85.8	0
20180417T055000	2018	04	17	05:50	34.5	85.7	0
20180417T055500	2018	04	17	05:55	34.4	86.4	0
20180417T060000	2018	04	17	06:00	34.4	86.8	0
20180417T060500	2018	04	17	06:05	34.4	86.6	0
20180417T061000	2018	04	17	06:10	34.4	86.8	0
20180417T061500	2018	04	17	06:15	34.2	87.9	0
20180417T062000	2018	04	17	06:20	34.2	87.9	0
20180417T062500	2018	04	17	06:25	34.2	88.2	0
20180417T063000	2018	04	17	06:30	34.1	88.4	0
20180417T063500	2018	04	17	06:35	34	89.2	0
20180417T064000	2018	04	17	06:40	34	89.5	0
20180417T064500	2018	04	17	06:45	34.1	89.4	0
20180417T065000	2018	04	17	06:50	34	89.8	0
20180417T065500	2018	04	17	06:55	34.1	89.5	0
20180417T070000	2018	04	17	07:00	34.1	89.5	0
20180417T070500	2018	04	17	07:05	34.1	89.8	0
20180417T071000	2018	04	17	07:10	34	90.1	0
20180417T071500	2018	04	17	07:15	34	90.6	0
20180417T072000	2018	04	17	07:20	34	90.9	0
20180417T072500	2018	04	17	07:25	34.1	90.6	0
20180417T073000	2018	04	17	07:30	34.1	90.4	0
20180417T073500	2018	04	17	07:35	34.2	90.1	0
20180417T074000	2018	04	17	07:40	34.2	90.5	0
20180417T074500	2018	04	17	07:45	34.2	90.9	0
20180417T075000	2018	04	17	07:50	34.3	91.1	0
20180417T075500	2018	04	17	07:55	34.4	91.6	0
20180417T080000	2018	04	17	08:00	34.5	91.9	0
20180417T080500	2018	04	17	08:05	34.6	91.8	0
20180417T081000	2018	04	17	08:10	34.7	91	0
20180417T081500	2018	04	17	08:15	35	90.3	0
20180417T082000	2018	04	17	08:20	35.2	89.7	0
20180417T082500	2018	04	17	08:25	35.5	88.1	0
20180417T083000	2018	04	17	08:30	35.7	87.5	0
20180417T083500	2018	04	17	08:35	35.7	86.4	0
20180417T084000	2018	04	17	08:40	35.6	85.4	0
20180417T084500	2018	04	17	08:45	35.6	85.4	0
20180417T085000	2018	04	17	08:50	35.6	85.3	0
20180417T085500	2018	04	17	08:55	35.7	85.6	0
20180417T090000	2018	04	17	09:00	35.6	85.1	0
20180417T090500	2018	04	17	09:05	35.7	86.6	0
20180417T091000	2018	04	17	09:10	35.6	86.6	0
20180417T091500	2018	04	17	09:15	35.5	88.4	0
20180417T092000	2018	04	17	09:20	35.4	89	0
20180417T092500	2018	04	17	09:25	35.4	89.1	0
20180417T093000	2018	04	17	09:30	35.4	89.1	0
20180417T093500	2018	04	17	09:35	35.4	89.5	0
20180417T094000	2018	04	17	09:40	35.4	88.8	0
20180417T094500	2018	04	17	09:45	35.7	88.4	0
20180417T095000	2018	04	17	09:50	35.8	86.6	0
20180417T095500	2018	04	17	09:55	36	85.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180417T100000	2018	04	17	10:00	36.3	84.2	0
20180417T100500	2018	04	17	10:05	36.6	82.9	0
20180417T101000	2018	04	17	10:10	36.8	81.3	0
20180417T101500	2018	04	17	10:15	36.9	80.3	0
20180417T102000	2018	04	17	10:20	37.1	78.6	0
20180417T102500	2018	04	17	10:25	37.1	76.4	0
20180417T103000	2018	04	17	10:30	37.5	75.7	0
20180417T103500	2018	04	17	10:35	37.8	73.6	0
20180417T104000	2018	04	17	10:40	38.2	72.4	0
20180417T104500	2018	04	17	10:45	38.1	72.1	0
20180417T105000	2018	04	17	10:50	38.2	69.9	0
20180417T105500	2018	04	17	10:55	38.3	71.3	0
20180417T110000	2018	04	17	11:00	38.9	72	0
20180417T110500	2018	04	17	11:05	39.5	70.3	0
20180417T111000	2018	04	17	11:10	39.8	68.3	0
20180417T111500	2018	04	17	11:15	39.1	67	0
20180417T112000	2018	04	17	11:20	38.3	68.6	0
20180417T112500	2018	04	17	11:25	39.2	69	0
20180417T113000	2018	04	17	11:30	39.3	67.1	0
20180417T113500	2018	04	17	11:35	38.5	65.2	0
20180417T114000	2018	04	17	11:40	37.3	65.4	0
20180417T114500	2018	04	17	11:45	36.7	68.7	0
20180417T115000	2018	04	17	11:50	36.6	70.1	0
20180417T115500	2018	04	17	11:55	37.1	70.5	0
20180417T120000	2018	04	17	12:00	37	69.4	0
20180417T120500	2018	04	17	12:05	37.3	71.6	0
20180417T121000	2018	04	17	12:10	37.6	70.5	0
20180417T121500	2018	04	17	12:15	37.7	69	0
20180417T122000	2018	04	17	12:20	38.1	67.3	0
20180417T122500	2018	04	17	12:25	38	68.4	0
20180417T123000	2018	04	17	12:30	38	67.6	0
20180417T123500	2018	04	17	12:35	37.4	66.6	0
20180417T124000	2018	04	17	12:40	37.1	66.2	0
20180417T124500	2018	04	17	12:45	37.5	67	0
20180417T125000	2018	04	17	12:50	37.1	66.8	0
20180417T125500	2018	04	17	12:55	37.3	68.7	0
20180417T130000	2018	04	17	13:00	36.9	65.8	0
20180417T130500	2018	04	17	13:05	37.2	66.5	0
20180417T131000	2018	04	17	13:10	37.5	66.4	0
20180417T131500	2018	04	17	13:15	37.1	64.9	0
20180417T132000	2018	04	17	13:20	37.5	66.1	0
20180417T132500	2018	04	17	13:25	37.7	65.8	0
20180417T133000	2018	04	17	13:30	38.1	65.6	0
20180417T133500	2018	04	17	13:35	37.4	65.5	0
20180417T134000	2018	04	17	13:40	37.4	65.8	0
20180417T134500	2018	04	17	13:45	37.5	66.2	0
20180417T135000	2018	04	17	13:50	37.5	64.6	0
20180417T135500	2018	04	17	13:55	38	64.6	0
20180417T140000	2018	04	17	14:00	37.5	63.3	0
20180417T140500	2018	04	17	14:05	37.1	63.1	0
20180417T141000	2018	04	17	14:10	35.9	66	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180417T141500	2018	04	17	14:15	35.6	71.2	0
20180417T142000	2018	04	17	14:20	36.6	67.7	0
20180417T142500	2018	04	17	14:25	37.4	66.8	0
20180417T143000	2018	04	17	14:30	37	61.8	0
20180417T143500	2018	04	17	14:35	37.2	59.4	0
20180417T144000	2018	04	17	14:40	37.6	59.7	0
20180417T144500	2018	04	17	14:45	37.2	60.2	0
20180417T145000	2018	04	17	14:50	37.1	60.5	0
20180417T145500	2018	04	17	14:55	36.8	61.3	0
20180417T150000	2018	04	17	15:00	36.4	61.4	0
20180417T150500	2018	04	17	15:05	36.3	62.9	0
20180417T151000	2018	04	17	15:10	36.4	64.4	0
20180417T151500	2018	04	17	15:15	36.3	65.3	0
20180417T152000	2018	04	17	15:20	36.4	65.6	0
20180417T152500	2018	04	17	15:25	36.8	66.8	0
20180417T153000	2018	04	17	15:30	35.9	66.6	0
20180417T153500	2018	04	17	15:35	36.3	67.8	0
20180417T154000	2018	04	17	15:40	35.9	68	0
20180417T154500	2018	04	17	15:45	35.8	68.4	0
20180417T155000	2018	04	17	15:50	36	68.1	0
20180417T155500	2018	04	17	15:55	36.4	66.3	0
20180417T160000	2018	04	17	16:00	36.3	64.8	0
20180417T160500	2018	04	17	16:05	36.3	66.1	0
20180417T161000	2018	04	17	16:10	36.5	66.2	0
20180417T161500	2018	04	17	16:15	36.8	65.2	0
20180417T162000	2018	04	17	16:20	36.7	63.8	0
20180417T162500	2018	04	17	16:25	36.9	63.5	0
20180417T163000	2018	04	17	16:30	36.9	62.7	0
20180417T163500	2018	04	17	16:35	36.8	63.4	0
20180417T164000	2018	04	17	16:40	36.9	63.7	0
20180417T164500	2018	04	17	16:45	36.6	63.6	0
20180417T165000	2018	04	17	16:50	36.7	63.2	0
20180417T165500	2018	04	17	16:55	37.2	63.5	0
20180417T170000	2018	04	17	17:00	37.4	63.4	0
20180417T170500	2018	04	17	17:05	37.6	64.9	0
20180417T171000	2018	04	17	17:10	36.9	65	0
20180417T171500	2018	04	17	17:15	37	64.9	0
20180417T172000	2018	04	17	17:20	36.8	64.6	0
20180417T172500	2018	04	17	17:25	36.6	64.7	0
20180417T173000	2018	04	17	17:30	36.4	65.8	0
20180417T173500	2018	04	17	17:35	36.1	66.2	0
20180417T174000	2018	04	17	17:40	36	67.4	0
20180417T174500	2018	04	17	17:45	35.8	67.6	0
20180417T175000	2018	04	17	17:50	35.8	68.2	0
20180417T175500	2018	04	17	17:55	35.7	68.8	0
20180417T180000	2018	04	17	18:00	35.5	68.1	0
20180417T180500	2018	04	17	18:05	35.4	68.5	0
20180417T181000	2018	04	17	18:10	35.1	68.9	0
20180417T181500	2018	04	17	18:15	34.9	69.3	0
20180417T182000	2018	04	17	18:20	34.8	70.4	0
20180417T182500	2018	04	17	18:25	34.7	70.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180417T183000	2018	04	17	18:30	34.6	71.2	0
20180417T183500	2018	04	17	18:35	34.5	70.9	0
20180417T184000	2018	04	17	18:40	34.3	71.5	0
20180417T184500	2018	04	17	18:45	34.2	72.3	0
20180417T185000	2018	04	17	18:50	34.1	72.7	0
20180417T185500	2018	04	17	18:55	34.1	73.6	0
20180417T190000	2018	04	17	19:00	34	74.1	0
20180417T190500	2018	04	17	19:05	33.9	74.4	0
20180417T191000	2018	04	17	19:10	33.8	74.2	0
20180417T191500	2018	04	17	19:15	33.8	74.8	0
20180417T192000	2018	04	17	19:20	33.7	75.1	0
20180417T192500	2018	04	17	19:25	33.6	75.1	0
20180417T193000	2018	04	17	19:30	33.5	75.7	0
20180417T193500	2018	04	17	19:35	33.5	75.2	0
20180417T194000	2018	04	17	19:40	33.4	76.1	0
20180417T194500	2018	04	17	19:45	33.4	76.6	0
20180417T195000	2018	04	17	19:50	33.5	76	0
20180417T195500	2018	04	17	19:55	33.4	76.1	0
20180417T200000	2018	04	17	20:00	33.4	76.5	0
20180417T200500	2018	04	17	20:05	33.3	76.6	0
20180417T201000	2018	04	17	20:10	33.1	76.1	0
20180417T201500	2018	04	17	20:15	33.2	74.7	0
20180417T202000	2018	04	17	20:20	33.1	72.6	0
20180417T202500	2018	04	17	20:25	33.1	71.7	0
20180417T203000	2018	04	17	20:30	33.1	71.5	0
20180417T203500	2018	04	17	20:35	33	71.2	0
20180417T204000	2018	04	17	20:40	32.7	71.7	0
20180417T204500	2018	04	17	20:45	32.3	73.1	0
20180417T205000	2018	04	17	20:50	32.2	73.4	0
20180417T205500	2018	04	17	20:55	32.3	73.3	0
20180417T210000	2018	04	17	21:00	32.3	74.2	0
20180417T210500	2018	04	17	21:05	32.4	74.6	0
20180417T211000	2018	04	17	21:10	32.4	74.6	0
20180417T211500	2018	04	17	21:15	32.3	75.5	0
20180417T212000	2018	04	17	21:20	32.3	76	0
20180417T212500	2018	04	17	21:25	32.3	77.1	0
20180417T213000	2018	04	17	21:30	32.4	77.4	0
20180417T213500	2018	04	17	21:35	32.4	78.1	0
20180417T214000	2018	04	17	21:40	32.4	77.8	0
20180417T214500	2018	04	17	21:45	32.4	78	0
20180417T215000	2018	04	17	21:50	32.4	78.3	0
20180417T215500	2018	04	17	21:55	32.3	79.2	0
20180417T220000	2018	04	17	22:00	32.3	80	0
20180417T220500	2018	04	17	22:05	32.3	80.6	0
20180417T221000	2018	04	17	22:10	32.3	80.5	0
20180417T221500	2018	04	17	22:15	32.3	79.8	0
20180417T222000	2018	04	17	22:20	32.3	78.4	0
20180417T222500	2018	04	17	22:25	32.3	74.8	0
20180417T223000	2018	04	17	22:30	32.3	74	0
20180417T223500	2018	04	17	22:35	32	74	0
20180417T224000	2018	04	17	22:40	32	70.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180417T224500	2018	04	17	22:45	31.7	68.1	0
20180417T225000	2018	04	17	22:50	31.6	67	0
20180417T225500	2018	04	17	22:55	31.4	65.6	0
20180417T230000	2018	04	17	23:00	31.4	65.5	0
20180417T230500	2018	04	17	23:05	31.3	65.7	0
20180417T231000	2018	04	17	23:10	31.3	65.8	0
20180417T231500	2018	04	17	23:15	31	67	0
20180417T232000	2018	04	17	23:20	30.7	67.9	0
20180417T232500	2018	04	17	23:25	30.6	68.9	0
20180417T233000	2018	04	17	23:30	30.6	69.7	0
20180417T233500	2018	04	17	23:35	30.5	69.6	0
20180417T234000	2018	04	17	23:40	30.4	71	0
20180417T234500	2018	04	17	23:45	30.3	72.2	0
20180417T235000	2018	04	17	23:50	30.3	72.3	0
20180417T235500	2018	04	17	23:55	30.3	72.4	0
20180418T000000	2018	04	18	00:00	30.2	72.8	0
20180418T000500	2018	04	18	00:05	30.3	72.8	0
20180418T001000	2018	04	18	00:10	30.3	73.1	0
20180418T001500	2018	04	18	00:15	30.3	73.2	0
20180418T002000	2018	04	18	00:20	30.3	73.4	0
20180418T002500	2018	04	18	00:25	30.4	73	0
20180418T003000	2018	04	18	00:30	30.3	73.4	0
20180418T003500	2018	04	18	00:35	30.3	73.7	0
20180418T004000	2018	04	18	00:40	30.3	73.6	0
20180418T004500	2018	04	18	00:45	30.3	73.7	0
20180418T005000	2018	04	18	00:50	30.3	74	0
20180418T005500	2018	04	18	00:55	30.4	73.6	0
20180418T010000	2018	04	18	01:00	30.4	73.6	0
20180418T010500	2018	04	18	01:05	30.4	73.9	0
20180418T011000	2018	04	18	01:10	30.4	73.6	0
20180418T011500	2018	04	18	01:15	30.4	74.4	0
20180418T012000	2018	04	18	01:20	30.3	74.6	0
20180418T012500	2018	04	18	01:25	30.3	74.9	0
20180418T013000	2018	04	18	01:30	30.3	75.5	0
20180418T013500	2018	04	18	01:35	30.3	75.2	0
20180418T014000	2018	04	18	01:40	30.3	75.5	0
20180418T014500	2018	04	18	01:45	30.3	75.7	0
20180418T015000	2018	04	18	01:50	30.4	75.6	0
20180418T015500	2018	04	18	01:55	30.4	75.6	0
20180418T020000	2018	04	18	02:00	30.4	76	0
20180418T020500	2018	04	18	02:05	30.3	76.6	0
20180418T021000	2018	04	18	02:10	30.3	77.1	0
20180418T021500	2018	04	18	02:15	30.4	77.2	0
20180418T022000	2018	04	18	02:20	30.5	76.9	0
20180418T022500	2018	04	18	02:25	30.5	76.9	0
20180418T023000	2018	04	18	02:30	30.6	76.5	0
20180418T023500	2018	04	18	02:35	30.7	76.3	0
20180418T024000	2018	04	18	02:40	30.7	76.7	0
20180418T024500	2018	04	18	02:45	30.6	77.2	0
20180418T025000	2018	04	18	02:50	30.7	77.5	0
20180418T025500	2018	04	18	02:55	30.7	77.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180418T030000	2018	04	18	03:00	30.9	77	0
20180418T030500	2018	04	18	03:05	30.9	76.8	0
20180418T031000	2018	04	18	03:10	30.9	77.5	0
20180418T031500	2018	04	18	03:15	30.9	77.7	0
20180418T032000	2018	04	18	03:20	30.9	78.3	0
20180418T032500	2018	04	18	03:25	30.8	79.6	0
20180418T033000	2018	04	18	03:30	30.7	80.4	0
20180418T033500	2018	04	18	03:35	30.6	81.2	0
20180418T034000	2018	04	18	03:40	30.6	81.6	0
20180418T034500	2018	04	18	03:45	30.6	81.6	0
20180418T035000	2018	04	18	03:50	30.7	80.9	0
20180418T035500	2018	04	18	03:55	30.7	80.8	0
20180418T040000	2018	04	18	04:00	30.8	80	0
20180418T040500	2018	04	18	04:05	30.9	79.3	0
20180418T041000	2018	04	18	04:10	30.9	79	0
20180418T041500	2018	04	18	04:15	30.9	79.1	0
20180418T042000	2018	04	18	04:20	31	79.1	0
20180418T042500	2018	04	18	04:25	31	79.1	0
20180418T043000	2018	04	18	04:30	31	79.1	0
20180418T043500	2018	04	18	04:35	31	79.3	0
20180418T044000	2018	04	18	04:40	30.9	79.7	0
20180418T044500	2018	04	18	04:45	30.9	80.3	0
20180418T045000	2018	04	18	04:50	31	80.4	0
20180418T045500	2018	04	18	04:55	30.9	81.1	0
20180418T050000	2018	04	18	05:00	31	80.6	0
20180418T050500	2018	04	18	05:05	31	80.8	0
20180418T051000	2018	04	18	05:10	31.1	80.7	0
20180418T051500	2018	04	18	05:15	31	81	0
20180418T052000	2018	04	18	05:20	31.1	82.1	0
20180418T052500	2018	04	18	05:25	31	82.8	0
20180418T053000	2018	04	18	05:30	31	83.1	0
20180418T053500	2018	04	18	05:35	31	83.6	0
20180418T054000	2018	04	18	05:40	31.1	83.8	0
20180418T054500	2018	04	18	05:45	31.1	83.8	0
20180418T055000	2018	04	18	05:50	31.2	83.9	0
20180418T055500	2018	04	18	05:55	31.2	84.1	0
20180418T060000	2018	04	18	06:00	31.3	84.1	0
20180418T060500	2018	04	18	06:05	31.2	84.6	0
20180418T061000	2018	04	18	06:10	31.4	84.6	0
20180418T061500	2018	04	18	06:15	31.6	84.3	0
20180418T062000	2018	04	18	06:20	31.7	84.6	0
20180418T062500	2018	04	18	06:25	31.7	85.1	0
20180418T063000	2018	04	18	06:30	31.8	85.6	0
20180418T063500	2018	04	18	06:35	32.1	86.5	0
20180418T064000	2018	04	18	06:40	32.2	87.3	0
20180418T064500	2018	04	18	06:45	32.1	88.8	0
20180418T065000	2018	04	18	06:50	32.1	90.3	0
20180418T065500	2018	04	18	06:55	32.2	91.1	0
20180418T070000	2018	04	18	07:00	32.2	91.8	0
20180418T070500	2018	04	18	07:05	32.2	92.5	0
20180418T071000	2018	04	18	07:10	32.3	92.8	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180418T071500	2018	04	18	07:15	32.4	92.5	0
20180418T072000	2018	04	18	07:20	32.5	92.2	0
20180418T072500	2018	04	18	07:25	32.7	91.7	0
20180418T073000	2018	04	18	07:30	32.7	91.8	0
20180418T073500	2018	04	18	07:35	32.8	91.4	0
20180418T074000	2018	04	18	07:40	32.9	91.3	0
20180418T074500	2018	04	18	07:45	33	91.2	0
20180418T075000	2018	04	18	07:50	33	91.2	0
20180418T075500	2018	04	18	07:55	33	91.8	0
20180418T080000	2018	04	18	08:00	32.9	91.8	0
20180418T080500	2018	04	18	08:05	32.9	92.1	0
20180418T081000	2018	04	18	08:10	33.1	92.1	0
20180418T081500	2018	04	18	08:15	33.1	91.2	0
20180418T082000	2018	04	18	08:20	33.2	91.3	0
20180418T082500	2018	04	18	08:25	33.5	90.1	0
20180418T083000	2018	04	18	08:30	33.9	89.4	0
20180418T083500	2018	04	18	08:35	33.9	88.1	0
20180418T084000	2018	04	18	08:40	34.1	86.6	0
20180418T084500	2018	04	18	08:45	34.3	85.7	0
20180418T085000	2018	04	18	08:50	34.6	84.5	0
20180418T085500	2018	04	18	08:55	34.6	83.4	0
20180418T090000	2018	04	18	09:00	34.6	83.2	0
20180418T090500	2018	04	18	09:05	34.6	83	0
20180418T091000	2018	04	18	09:10	34.8	82.3	0
20180418T091500	2018	04	18	09:15	34.8	82	0
20180418T092000	2018	04	18	09:20	34.8	82.2	0
20180418T092500	2018	04	18	09:25	35	82.2	0
20180418T093000	2018	04	18	09:30	35.1	81.6	0
20180418T093500	2018	04	18	09:35	35.2	81.8	0
20180418T094000	2018	04	18	09:40	35.2	81.2	0
20180418T094500	2018	04	18	09:45	35.1	80.9	0
20180418T095000	2018	04	18	09:50	35.1	80.9	0
20180418T095500	2018	04	18	09:55	35.2	80.7	0
20180418T100000	2018	04	18	10:00	35.2	80.3	0
20180418T100500	2018	04	18	10:05	35.3	80.1	0
20180418T101000	2018	04	18	10:10	35.5	79.2	0
20180418T101500	2018	04	18	10:15	35.7	79	0
20180418T102000	2018	04	18	10:20	35.9	78.2	0
20180418T102500	2018	04	18	10:25	36.2	77.7	0
20180418T103000	2018	04	18	10:30	36.2	76.9	0
20180418T103500	2018	04	18	10:35	36.3	76.6	0
20180418T104000	2018	04	18	10:40	36.7	75.7	0
20180418T104500	2018	04	18	10:45	36.6	75.6	0
20180418T105000	2018	04	18	10:50	36.8	75.8	0
20180418T105500	2018	04	18	10:55	36.7	76	0
20180418T110000	2018	04	18	11:00	36.5	75.9	0
20180418T110500	2018	04	18	11:05	36.7	75.5	0
20180418T111000	2018	04	18	11:10	36.6	75.3	0
20180418T111500	2018	04	18	11:15	36.6	75.4	0
20180418T112000	2018	04	18	11:20	36.9	76.2	0
20180418T112500	2018	04	18	11:25	37	76.3	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180418T113000	2018	04	18	11:30	37	77.4	0
20180418T113500	2018	04	18	11:35	36.9	76	0
20180418T114000	2018	04	18	11:40	37.2	75.6	0
20180418T114500	2018	04	18	11:45	37.4	75.6	0
20180418T115000	2018	04	18	11:50	37	76.2	0
20180418T115500	2018	04	18	11:55	36.9	76.4	0
20180418T120000	2018	04	18	12:00	36.9	76.5	0
20180418T120500	2018	04	18	12:05	36.9	76.3	0
20180418T121000	2018	04	18	12:10	36.9	76.4	0
20180418T121500	2018	04	18	12:15	36.9	76.8	0
20180418T122000	2018	04	18	12:20	37.1	76.8	0
20180418T122500	2018	04	18	12:25	37.4	76.2	0
20180418T123000	2018	04	18	12:30	37.6	76.5	0
20180418T123500	2018	04	18	12:35	37.4	76.2	0
20180418T124000	2018	04	18	12:40	37.3	76.9	0
20180418T124500	2018	04	18	12:45	37.2	77.2	0
20180418T125000	2018	04	18	12:50	37.4	76.5	0
20180418T125500	2018	04	18	12:55	37.4	76.6	0
20180418T130000	2018	04	18	13:00	37.4	76.2	0
20180418T130500	2018	04	18	13:05	37.5	75.2	0
20180418T131000	2018	04	18	13:10	38.1	74.3	0
20180418T131500	2018	04	18	13:15	38.2	73.4	0
20180418T132000	2018	04	18	13:20	38.3	73.1	0
20180418T132500	2018	04	18	13:25	38.5	73.2	0
20180418T133000	2018	04	18	13:30	38.9	72.8	0
20180418T133500	2018	04	18	13:35	39.3	71.7	0
20180418T134000	2018	04	18	13:40	39.5	72	0
20180418T134500	2018	04	18	13:45	39.6	71	0
20180418T135000	2018	04	18	13:50	41	70.1	0
20180418T135500	2018	04	18	13:55	41.3	67.4	0
20180418T140000	2018	04	18	14:00	40.4	67.9	0
20180418T140500	2018	04	18	14:05	40.7	67.8	0
20180418T141000	2018	04	18	14:10	40.7	67.8	0
20180418T141500	2018	04	18	14:15	39.9	68.5	0
20180418T142000	2018	04	18	14:20	40.1	69.1	0
20180418T142500	2018	04	18	14:25	40.1	68.5	0
20180418T143000	2018	04	18	14:30	39.8	69.6	0
20180418T143500	2018	04	18	14:35	39.5	69.4	0
20180418T144000	2018	04	18	14:40	39.5	70.4	0
20180418T144500	2018	04	18	14:45	39.5	70.4	0
20180418T145000	2018	04	18	14:50	39.5	70.1	0
20180418T145500	2018	04	18	14:55	39.2	69.5	0
20180418T150000	2018	04	18	15:00	39.2	70.1	0
20180418T150500	2018	04	18	15:05	39.4	70	0
20180418T151000	2018	04	18	15:10	39.5	68.1	0
20180418T151500	2018	04	18	15:15	40.3	67.6	0
20180418T152000	2018	04	18	15:20	40.1	66.4	0
20180418T152500	2018	04	18	15:25	39.7	66.9	0
20180418T153000	2018	04	18	15:30	39.6	67.6	0
20180418T153500	2018	04	18	15:35	39.4	68.8	0
20180418T154000	2018	04	18	15:40	39.2	69.3	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180418T154500	2018	04	18	15:45	39.3	69.5	0
20180418T155000	2018	04	18	15:50	39.5	68.4	0
20180418T155500	2018	04	18	15:55	39.9	68.5	0
20180418T160000	2018	04	18	16:00	40.1	66.5	0
20180418T160500	2018	04	18	16:05	40.1	66	0
20180418T161000	2018	04	18	16:10	39.8	65.4	0
20180418T161500	2018	04	18	16:15	39.7	66.2	0
20180418T162000	2018	04	18	16:20	39.6	66.2	0
20180418T162500	2018	04	18	16:25	39.7	66.4	0
20180418T163000	2018	04	18	16:30	39.9	65.9	0
20180418T163500	2018	04	18	16:35	39.9	65.3	0
20180418T164000	2018	04	18	16:40	40	65.5	0
20180418T164500	2018	04	18	16:45	40.1	65.6	0
20180418T165000	2018	04	18	16:50	39.8	65.4	0
20180418T165500	2018	04	18	16:55	39.8	65.6	0
20180418T170000	2018	04	18	17:00	39.7	65.5	0
20180418T170500	2018	04	18	17:05	39.7	65.7	0
20180418T171000	2018	04	18	17:10	39.6	65.7	0
20180418T171500	2018	04	18	17:15	39.8	66.3	0
20180418T172000	2018	04	18	17:20	39.7	66.5	0
20180418T172500	2018	04	18	17:25	39.4	66.7	0
20180418T173000	2018	04	18	17:30	39.3	67.5	0
20180418T173500	2018	04	18	17:35	39.1	67.3	0
20180418T174000	2018	04	18	17:40	39	67.6	0
20180418T174500	2018	04	18	17:45	38.9	68.2	0
20180418T175000	2018	04	18	17:50	38.8	68	0
20180418T175500	2018	04	18	17:55	38.7	68.5	0
20180418T180000	2018	04	18	18:00	38.7	68.9	0
20180418T180500	2018	04	18	18:05	38.7	68.9	0
20180418T181000	2018	04	18	18:10	38.7	69.3	0
20180418T181500	2018	04	18	18:15	38.7	69.2	0
20180418T182000	2018	04	18	18:20	38.7	70	0
20180418T182500	2018	04	18	18:25	38.6	69.6	0
20180418T183000	2018	04	18	18:30	38.6	69.5	0
20180418T183500	2018	04	18	18:35	38.5	69.8	0
20180418T184000	2018	04	18	18:40	38.4	69.3	0
20180418T184500	2018	04	18	18:45	38.4	69.5	0
20180418T185000	2018	04	18	18:50	38.4	68.8	0
20180418T185500	2018	04	18	18:55	38.3	68.8	0
20180418T190000	2018	04	18	19:00	38.3	69.3	0
20180418T190500	2018	04	18	19:05	38.2	69.5	0
20180418T191000	2018	04	18	19:10	38.1	70.2	0
20180418T191500	2018	04	18	19:15	37.9	70.8	0
20180418T192000	2018	04	18	19:20	37.8	71.6	0
20180418T192500	2018	04	18	19:25	37.7	72.1	0
20180418T193000	2018	04	18	19:30	37.7	72.5	0
20180418T193500	2018	04	18	19:35	37.5	73	0
20180418T194000	2018	04	18	19:40	37.5	73.4	0
20180418T194500	2018	04	18	19:45	37.3	74	0
20180418T195000	2018	04	18	19:50	37.3	74.2	0
20180418T195500	2018	04	18	19:55	37.2	74.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180418T200000	2018	04	18	20:00	37.2	74.8	0
20180418T200500	2018	04	18	20:05	37.1	75	0
20180418T201000	2018	04	18	20:10	37	75.1	0
20180418T201500	2018	04	18	20:15	37.1	74.9	0
20180418T202000	2018	04	18	20:20	37.1	74.5	0
20180418T202500	2018	04	18	20:25	37.2	74	0
20180418T203000	2018	04	18	20:30	37.2	73.8	0
20180418T203500	2018	04	18	20:35	37.2	73.7	0
20180418T204000	2018	04	18	20:40	37.1	74	0
20180418T204500	2018	04	18	20:45	37	74.9	0
20180418T205000	2018	04	18	20:50	36.9	75.2	0
20180418T205500	2018	04	18	20:55	36.9	75.6	0
20180418T210000	2018	04	18	21:00	36.9	75.6	0
20180418T210500	2018	04	18	21:05	36.9	75.4	0
20180418T211000	2018	04	18	21:10	36.8	75.3	0
20180418T211500	2018	04	18	21:15	36.9	75.1	0
20180418T212000	2018	04	18	21:20	36.8	75.1	0
20180418T212500	2018	04	18	21:25	36.8	74.9	0
20180418T213000	2018	04	18	21:30	36.8	74.9	0
20180418T213500	2018	04	18	21:35	36.7	75.2	0
20180418T214000	2018	04	18	21:40	36.7	75.4	0
20180418T214500	2018	04	18	21:45	36.7	75.4	0
20180418T215000	2018	04	18	21:50	36.6	75.3	0
20180418T215500	2018	04	18	21:55	36.6	75.5	0
20180418T220000	2018	04	18	22:00	36.6	75.5	0
20180418T220500	2018	04	18	22:05	36.5	75.3	0
20180418T221000	2018	04	18	22:10	36.4	75.9	0
20180418T221500	2018	04	18	22:15	36.3	76.9	0
20180418T222000	2018	04	18	22:20	36.4	76.5	0
20180418T222500	2018	04	18	22:25	36.2	77.6	0
20180418T223000	2018	04	18	22:30	36.2	77.5	0
20180418T223500	2018	04	18	22:35	36.2	77	0
20180418T224000	2018	04	18	22:40	36.2	77.2	0
20180418T224500	2018	04	18	22:45	36	77.8	0
20180418T225000	2018	04	18	22:50	36.1	77.7	0
20180418T225500	2018	04	18	22:55	36	77.9	0
20180418T230000	2018	04	18	23:00	36	77.8	0
20180418T230500	2018	04	18	23:05	35.9	78	0
20180418T231000	2018	04	18	23:10	35.9	78.1	0
20180418T231500	2018	04	18	23:15	35.9	78.1	0
20180418T232000	2018	04	18	23:20	35.8	78.3	0
20180418T232500	2018	04	18	23:25	35.7	78.6	0
20180418T233000	2018	04	18	23:30	35.8	78.5	0
20180418T233500	2018	04	18	23:35	35.8	78.2	0
20180418T234000	2018	04	18	23:40	35.8	78.1	0
20180418T234500	2018	04	18	23:45	35.7	78.2	0
20180418T235000	2018	04	18	23:50	35.7	78.9	0
20180418T235500	2018	04	18	23:55	35.7	79	0
20180419T000000	2018	04	19	00:00	35.6	79	0
20180419T000500	2018	04	19	00:05	35.7	78.8	0
20180419T001000	2018	04	19	00:10	35.7	78.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180419T001500	2018	04	19	00:15	35.6	78.5	0
20180419T002000	2018	04	19	00:20	35.5	78.6	0
20180419T002500	2018	04	19	00:25	35.5	78.6	0
20180419T003000	2018	04	19	00:30	35.5	78.7	0
20180419T003500	2018	04	19	00:35	35.6	78.3	0
20180419T004000	2018	04	19	00:40	35.6	78	0
20180419T004500	2018	04	19	00:45	35.6	78	0
20180419T005000	2018	04	19	00:50	35.6	77.5	0
20180419T005500	2018	04	19	00:55	35.6	77.4	0
20180419T010000	2018	04	19	01:00	35.7	77.1	0
20180419T010500	2018	04	19	01:05	35.6	76.7	0
20180419T011000	2018	04	19	01:10	35.6	76.4	0
20180419T011500	2018	04	19	01:15	35.7	75.9	0
20180419T012000	2018	04	19	01:20	35.6	75.8	0
20180419T012500	2018	04	19	01:25	35.6	75.9	0
20180419T013000	2018	04	19	01:30	35.6	75.7	0
20180419T013500	2018	04	19	01:35	35.6	75.4	0
20180419T014000	2018	04	19	01:40	35.4	75.8	0
20180419T014500	2018	04	19	01:45	35.4	76.1	0
20180419T015000	2018	04	19	01:50	35.3	76.5	0
20180419T015500	2018	04	19	01:55	34.8	80.2	0
20180419T020000	2018	04	19	02:00	33.8	86.5	0.01
20180419T020500	2018	04	19	02:05	33.2	91.3	0
20180419T021000	2018	04	19	02:10	32.8	93.7	0
20180419T021500	2018	04	19	02:15	32.7	95.1	0
20180419T022000	2018	04	19	02:20	32.6	95.7	0
20180419T022500	2018	04	19	02:25	32.5	96.3	0
20180419T023000	2018	04	19	02:30	32.3	96.8	0
20180419T023500	2018	04	19	02:35	32.2	97.2	0
20180419T024000	2018	04	19	02:40	31.9	97.4	0
20180419T024500	2018	04	19	02:45	31.6	97.4	0
20180419T025000	2018	04	19	02:50	31.6	97.6	0
20180419T025500	2018	04	19	02:55	31.8	97.8	0
20180419T030000	2018	04	19	03:00	32.1	97.7	0
20180419T030500	2018	04	19	03:05	32.3	97.2	0
20180419T031000	2018	04	19	03:10	32.4	96.4	0
20180419T031500	2018	04	19	03:15	32.4	95.6	0
20180419T032000	2018	04	19	03:20	32.4	95.3	0
20180419T032500	2018	04	19	03:25	32.4	95.5	0
20180419T033000	2018	04	19	03:30	32.3	95.7	0
20180419T033500	2018	04	19	03:35	32.3	95.9	0
20180419T034000	2018	04	19	03:40	32.4	96	0
20180419T034500	2018	04	19	03:45	32.5	95.5	0
20180419T035000	2018	04	19	03:50	32.5	95.1	0
20180419T035500	2018	04	19	03:55	32.5	95	0
20180419T040000	2018	04	19	04:00	32.5	95	0
20180419T040500	2018	04	19	04:05	32.5	94.8	0
20180419T041000	2018	04	19	04:10	32.5	94.9	0
20180419T041500	2018	04	19	04:15	32.5	95.1	0
20180419T042000	2018	04	19	04:20	32.4	95.2	0
20180419T042500	2018	04	19	04:25	32.4	95.3	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180419T043000	2018	04	19	04:30	32.4	95.2	0
20180419T043500	2018	04	19	04:35	32.3	95.1	0
20180419T044000	2018	04	19	04:40	32.3	95.3	0
20180419T044500	2018	04	19	04:45	32.3	95.3	0
20180419T045000	2018	04	19	04:50	32.3	95.3	0
20180419T045500	2018	04	19	04:55	32.3	95.4	0
20180419T050000	2018	04	19	05:00	32.2	95.4	0
20180419T050500	2018	04	19	05:05	32.2	95.5	0
20180419T051000	2018	04	19	05:10	32.2	95.8	0
20180419T051500	2018	04	19	05:15	32.2	96.1	0
20180419T052000	2018	04	19	05:20	32.2	96.4	0
20180419T052500	2018	04	19	05:25	32.1	96.6	0
20180419T053000	2018	04	19	05:30	32.1	96.7	0
20180419T053500	2018	04	19	05:35	32	96.8	0
20180419T054000	2018	04	19	05:40	32	96.9	0
20180419T054500	2018	04	19	05:45	31.9	97.2	0
20180419T055000	2018	04	19	05:50	31.8	97.5	0
20180419T055500	2018	04	19	05:55	31.8	98.3	0
20180419T060000	2018	04	19	06:00	31.7	99.8	0
20180419T060500	2018	04	19	06:05	31.8	99.9	0
20180419T061000	2018	04	19	06:10	31.8	100	0
20180419T061500	2018	04	19	06:15	31.7	99.9	0
20180419T062000	2018	04	19	06:20	31.9	99.9	0
20180419T062500	2018	04	19	06:25	31.9	99.9	0
20180419T063000	2018	04	19	06:30	31.9	99.9	0
20180419T063500	2018	04	19	06:35	31.9	99.9	0
20180419T064000	2018	04	19	06:40	31.9	100	0
20180419T064500	2018	04	19	06:45	31.9	99.9	0
20180419T065000	2018	04	19	06:50	32	99.8	0
20180419T065500	2018	04	19	06:55	32.1	98.7	0
20180419T070000	2018	04	19	07:00	32.2	97.3	0
20180419T070500	2018	04	19	07:05	32.2	96.8	0
20180419T071000	2018	04	19	07:10	32.3	96.4	0
20180419T071500	2018	04	19	07:15	32.3	96.2	0
20180419T072000	2018	04	19	07:20	32.3	96.2	0
20180419T072500	2018	04	19	07:25	32.3	96.4	0
20180419T073000	2018	04	19	07:30	32.3	96.2	0
20180419T073500	2018	04	19	07:35	32.4	95.9	0
20180419T074000	2018	04	19	07:40	32.4	95.8	0
20180419T074500	2018	04	19	07:45	32.4	95.6	0
20180419T075000	2018	04	19	07:50	32.5	95.5	0
20180419T075500	2018	04	19	07:55	32.5	95.4	0
20180419T080000	2018	04	19	08:00	32.4	95.4	0
20180419T080500	2018	04	19	08:05	32.4	95.7	0
20180419T081000	2018	04	19	08:10	32.5	95.7	0
20180419T081500	2018	04	19	08:15	32.5	95.7	0
20180419T082000	2018	04	19	08:20	32.6	95.8	0
20180419T082500	2018	04	19	08:25	32.7	95.9	0
20180419T083000	2018	04	19	08:30	32.8	96	0
20180419T083500	2018	04	19	08:35	33.1	96.3	0
20180419T084000	2018	04	19	08:40	33.4	96.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180419T084500	2018	04	19	08:45	33.5	95.4	0
20180419T085000	2018	04	19	08:50	33.7	94.6	0
20180419T085500	2018	04	19	08:55	33.8	94	0
20180419T090000	2018	04	19	09:00	34.1	93	0
20180419T090500	2018	04	19	09:05	34.4	92.3	0
20180419T091000	2018	04	19	09:10	34.9	91.9	0
20180419T091500	2018	04	19	09:15	35.4	91.2	0
20180419T092000	2018	04	19	09:20	35.5	89.7	0
20180419T092500	2018	04	19	09:25	36	88.7	0
20180419T093000	2018	04	19	09:30	36.4	88.2	0
20180419T093500	2018	04	19	09:35	36.6	86.7	0
20180419T094000	2018	04	19	09:40	36.9	86.8	0
20180419T094500	2018	04	19	09:45	36.9	84.7	0
20180419T095000	2018	04	19	09:50	37.2	84.9	0
20180419T095500	2018	04	19	09:55	37.5	84.7	0
20180419T100000	2018	04	19	10:00	37.4	83.8	0
20180419T100500	2018	04	19	10:05	37.4	83.8	0
20180419T101000	2018	04	19	10:10	37.2	82.4	0
20180419T101500	2018	04	19	10:15	37.5	82.2	0
20180419T102000	2018	04	19	10:20	37.5	82.6	0
20180419T102500	2018	04	19	10:25	37.2	80.9	0
20180419T103000	2018	04	19	10:30	37.5	81.8	0
20180419T103500	2018	04	19	10:35	37.6	80.1	0
20180419T104000	2018	04	19	10:40	37.6	81.2	0
20180419T104500	2018	04	19	10:45	37.8	82.8	0
20180419T105000	2018	04	19	10:50	37.6	82	0
20180419T105500	2018	04	19	10:55	38	82.9	0
20180419T110000	2018	04	19	11:00	38.6	82.1	0
20180419T110500	2018	04	19	11:05	38.8	80.5	0
20180419T111000	2018	04	19	11:10	37.9	79.9	0
20180419T111500	2018	04	19	11:15	38.6	79.6	0
20180419T112000	2018	04	19	11:20	39.1	78.5	0
20180419T112500	2018	04	19	11:25	39.4	77.9	0
20180419T113000	2018	04	19	11:30	39	76.8	0
20180419T113500	2018	04	19	11:35	38.8	79.4	0
20180419T114000	2018	04	19	11:40	38.8	78.4	0
20180419T114500	2018	04	19	11:45	38.9	79	0
20180419T115000	2018	04	19	11:50	39.2	76.3	0
20180419T115500	2018	04	19	11:55	39.1	75.5	0
20180419T120000	2018	04	19	12:00	39.2	74.7	0
20180419T120500	2018	04	19	12:05	39.1	75.8	0
20180419T121000	2018	04	19	12:10	38.9	75.2	0
20180419T121500	2018	04	19	12:15	38.8	77.4	0
20180419T122000	2018	04	19	12:20	38.9	75.2	0
20180419T122500	2018	04	19	12:25	39	76.7	0
20180419T123000	2018	04	19	12:30	39.2	77	0
20180419T123500	2018	04	19	12:35	39.2	72.1	0
20180419T124000	2018	04	19	12:40	39.5	75.4	0
20180419T124500	2018	04	19	12:45	39.3	76.2	0
20180419T125000	2018	04	19	12:50	38.9	75.4	0
20180419T125500	2018	04	19	12:55	39.1	75	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180419T130000	2018	04	19	13:00	39.3	72.5	0
20180419T130500	2018	04	19	13:05	39.2	68.5	0
20180419T131000	2018	04	19	13:10	39.6	66.1	0
20180419T131500	2018	04	19	13:15	39.6	65	0
20180419T132000	2018	04	19	13:20	39.6	65.9	0
20180419T132500	2018	04	19	13:25	39.5	67	0
20180419T133000	2018	04	19	13:30	39.6	66.8	0
20180419T133500	2018	04	19	13:35	39.8	65.1	0
20180419T134000	2018	04	19	13:40	40	64.6	0
20180419T134500	2018	04	19	13:45	39.8	68.7	0
20180419T135000	2018	04	19	13:50	39.2	72	0
20180419T135500	2018	04	19	13:55	39.2	70.5	0
20180419T140000	2018	04	19	14:00	38.8	70.6	0
20180419T140500	2018	04	19	14:05	38.6	70	0
20180419T141000	2018	04	19	14:10	38.5	66.4	0
20180419T141500	2018	04	19	14:15	39.2	65.4	0
20180419T142000	2018	04	19	14:20	39.8	62.2	0
20180419T142500	2018	04	19	14:25	40.1	57.3	0
20180419T143000	2018	04	19	14:30	39.1	64.8	0
20180419T143500	2018	04	19	14:35	38.4	68.5	0
20180419T144000	2018	04	19	14:40	38.4	65.4	0
20180419T144500	2018	04	19	14:45	38.6	61.7	0
20180419T145000	2018	04	19	14:50	38.9	58.2	0
20180419T145500	2018	04	19	14:55	39	57.3	0
20180419T150000	2018	04	19	15:00	39.3	57.7	0
20180419T150500	2018	04	19	15:05	38.7	59.2	0
20180419T151000	2018	04	19	15:10	38.7	61.2	0
20180419T151500	2018	04	19	15:15	38.1	63.4	0
20180419T152000	2018	04	19	15:20	38	61.3	0
20180419T152500	2018	04	19	15:25	38.3	60.8	0
20180419T153000	2018	04	19	15:30	39	59.7	0
20180419T153500	2018	04	19	15:35	39.4	59.1	0
20180419T154000	2018	04	19	15:40	38.6	58.3	0
20180419T154500	2018	04	19	15:45	38.5	58.3	0
20180419T155000	2018	04	19	15:50	39.1	57.2	0
20180419T155500	2018	04	19	15:55	38.9	55.4	0
20180419T160000	2018	04	19	16:00	38.9	55.6	0
20180419T160500	2018	04	19	16:05	39.3	55.9	0
20180419T161000	2018	04	19	16:10	39	56.9	0
20180419T161500	2018	04	19	16:15	38.3	61.3	0
20180419T162000	2018	04	19	16:20	38.9	60.3	0
20180419T162500	2018	04	19	16:25	38.7	56.1	0
20180419T163000	2018	04	19	16:30	38.7	56.3	0
20180419T163500	2018	04	19	16:35	38.7	55.4	0
20180419T164000	2018	04	19	16:40	39	55.3	0
20180419T164500	2018	04	19	16:45	38.6	55	0
20180419T165000	2018	04	19	16:50	38.8	55.5	0
20180419T165500	2018	04	19	16:55	38.7	55.5	0
20180419T170000	2018	04	19	17:00	38.4	56.2	0
20180419T170500	2018	04	19	17:05	38	57.1	0
20180419T171000	2018	04	19	17:10	37.6	61.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180419T171500	2018	04	19	17:15	37.4	63.4	0
20180419T172000	2018	04	19	17:20	37.4	62.8	0
20180419T172500	2018	04	19	17:25	37.8	61.5	0
20180419T173000	2018	04	19	17:30	37.9	60.3	0
20180419T173500	2018	04	19	17:35	38	58.9	0
20180419T174000	2018	04	19	17:40	37.9	64.3	0
20180419T174500	2018	04	19	17:45	37.6	67.5	0
20180419T175000	2018	04	19	17:50	38	66.8	0
20180419T175500	2018	04	19	17:55	38.3	65	0
20180419T180000	2018	04	19	18:00	37.6	64.5	0
20180419T180500	2018	04	19	18:05	37.3	64.2	0
20180419T181000	2018	04	19	18:10	36.8	66	0
20180419T181500	2018	04	19	18:15	35.9	70.2	0
20180419T182000	2018	04	19	18:20	36.9	68.2	0
20180419T182500	2018	04	19	18:25	36.4	71.4	0
20180419T183000	2018	04	19	18:30	35.7	75.5	0
20180419T183500	2018	04	19	18:35	35.4	78	0
20180419T184000	2018	04	19	18:40	35.3	79.2	0
20180419T184500	2018	04	19	18:45	35.3	79	0
20180419T185000	2018	04	19	18:50	35.2	79.2	0
20180419T185500	2018	04	19	18:55	35.2	79.9	0
20180419T190000	2018	04	19	19:00	34.9	80.7	0
20180419T190500	2018	04	19	19:05	34.6	82.2	0
20180419T191000	2018	04	19	19:10	34.5	82	0
20180419T191500	2018	04	19	19:15	34.5	82.2	0
20180419T192000	2018	04	19	19:20	34.4	81.6	0
20180419T192500	2018	04	19	19:25	34.4	80.7	0
20180419T193000	2018	04	19	19:30	34.3	80.8	0
20180419T193500	2018	04	19	19:35	34.2	80.4	0
20180419T194000	2018	04	19	19:40	33.9	81.2	0
20180419T194500	2018	04	19	19:45	33.6	81.6	0
20180419T195000	2018	04	19	19:50	33.4	81.9	0
20180419T195500	2018	04	19	19:55	33.3	81.7	0
20180419T200000	2018	04	19	20:00	33.4	80.9	0
20180419T200500	2018	04	19	20:05	33.6	79.3	0
20180419T201000	2018	04	19	20:10	33.5	78.9	0
20180419T201500	2018	04	19	20:15	33.5	78.1	0
20180419T202000	2018	04	19	20:20	33.6	76.5	0
20180419T202500	2018	04	19	20:25	33.5	76.2	0
20180419T203000	2018	04	19	20:30	33.5	75.5	0
20180419T203500	2018	04	19	20:35	33.5	74.6	0
20180419T204000	2018	04	19	20:40	33.7	71.5	0
20180419T204500	2018	04	19	20:45	33.8	70.2	0
20180419T205000	2018	04	19	20:50	33.6	71.3	0
20180419T205500	2018	04	19	20:55	33.6	70.4	0
20180419T210000	2018	04	19	21:00	33.2	73	0
20180419T210500	2018	04	19	21:05	32.9	76.8	0
20180419T211000	2018	04	19	21:10	32.8	77.6	0
20180419T211500	2018	04	19	21:15	32.7	78.2	0
20180419T212000	2018	04	19	21:20	32.8	76.9	0
20180419T212500	2018	04	19	21:25	33.3	70.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180419T213000	2018	04	19	21:30	33.4	66.1	0
20180419T213500	2018	04	19	21:35	33.3	66.7	0
20180419T214000	2018	04	19	21:40	33.2	67.6	0
20180419T214500	2018	04	19	21:45	33.2	65.9	0
20180419T215000	2018	04	19	21:50	33.1	65	0
20180419T215500	2018	04	19	21:55	33.1	64.1	0
20180419T220000	2018	04	19	22:00	33.1	63.5	0
20180419T220500	2018	04	19	22:05	32.9	63.9	0
20180419T221000	2018	04	19	22:10	32.8	64.8	0
20180419T221500	2018	04	19	22:15	32.8	64.8	0
20180419T222000	2018	04	19	22:20	32.7	65	0
20180419T222500	2018	04	19	22:25	32.7	65	0
20180419T223000	2018	04	19	22:30	32.7	65.6	0
20180419T223500	2018	04	19	22:35	32.7	65.8	0
20180419T224000	2018	04	19	22:40	32.6	66.9	0
20180419T224500	2018	04	19	22:45	32.5	67.7	0
20180419T225000	2018	04	19	22:50	32.5	68	0
20180419T225500	2018	04	19	22:55	32.5	66.8	0
20180419T230000	2018	04	19	23:00	32.4	66.6	0
20180419T230500	2018	04	19	23:05	32.4	66.1	0
20180419T231000	2018	04	19	23:10	32.4	65.4	0
20180419T231500	2018	04	19	23:15	32.3	65.8	0
20180419T232000	2018	04	19	23:20	32.1	66.7	0
20180419T232500	2018	04	19	23:25	32	67.3	0
20180419T233000	2018	04	19	23:30	31.8	67.4	0
20180419T233500	2018	04	19	23:35	31.8	67.2	0
20180419T234000	2018	04	19	23:40	31.6	67.9	0
20180419T234500	2018	04	19	23:45	31.4	68.4	0
20180419T235000	2018	04	19	23:50	31.5	68.1	0
20180419T235500	2018	04	19	23:55	31.4	68.1	0
20180420T000000	2018	04	20	00:00	31.3	68.9	0
20180420T000500	2018	04	20	00:05	31.2	69.2	0
20180420T001000	2018	04	20	00:10	31.3	69.3	0
20180420T001500	2018	04	20	00:15	31.2	69.3	0
20180420T002000	2018	04	20	00:20	31.2	69.3	0
20180420T002500	2018	04	20	00:25	31.1	69.6	0
20180420T003000	2018	04	20	00:30	31.1	69.8	0
20180420T003500	2018	04	20	00:35	31.1	69.8	0
20180420T004000	2018	04	20	00:40	31	70.1	0
20180420T004500	2018	04	20	00:45	30.9	71.3	0
20180420T005000	2018	04	20	00:50	30.7	73.3	0
20180420T005500	2018	04	20	00:55	30.5	75.9	0
20180420T010000	2018	04	20	01:00	30.6	76.2	0
20180420T010500	2018	04	20	01:05	30.5	77.4	0
20180420T011000	2018	04	20	01:10	30.6	77.1	0
20180420T011500	2018	04	20	01:15	30.7	76.4	0
20180420T012000	2018	04	20	01:20	30.7	76.2	0
20180420T012500	2018	04	20	01:25	30.8	75	0
20180420T013000	2018	04	20	01:30	30.8	75.2	0
20180420T013500	2018	04	20	01:35	31	73.7	0
20180420T014000	2018	04	20	01:40	31	73.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180420T014500	2018	04	20	01:45	31	72.2	0
20180420T015000	2018	04	20	01:50	31	71.8	0
20180420T015500	2018	04	20	01:55	30.8	74.4	0
20180420T020000	2018	04	20	02:00	30.8	74.8	0
20180420T020500	2018	04	20	02:05	30.8	74.4	0
20180420T021000	2018	04	20	02:10	31.1	71.9	0
20180420T021500	2018	04	20	02:15	31.2	71.5	0
20180420T022000	2018	04	20	02:20	31.3	70	0
20180420T022500	2018	04	20	02:25	31.3	70.2	0
20180420T023000	2018	04	20	02:30	31.3	70.3	0
20180420T023500	2018	04	20	02:35	31	73.3	0
20180420T024000	2018	04	20	02:40	31	73.9	0
20180420T024500	2018	04	20	02:45	31.3	71.7	0
20180420T025000	2018	04	20	02:50	31.5	70.2	0
20180420T025500	2018	04	20	02:55	31.5	69.4	0
20180420T030000	2018	04	20	03:00	31.6	68.6	0
20180420T030500	2018	04	20	03:05	31.6	69.1	0
20180420T031000	2018	04	20	03:10	31.5	69.2	0
20180420T031500	2018	04	20	03:15	31.6	68.6	0
20180420T032000	2018	04	20	03:20	31.6	68.5	0
20180420T032500	2018	04	20	03:25	31.7	67.6	0
20180420T033000	2018	04	20	03:30	31.7	67.4	0
20180420T033500	2018	04	20	03:35	31.6	67.2	0
20180420T034000	2018	04	20	03:40	31.5	67.1	0
20180420T034500	2018	04	20	03:45	31.6	66.9	0
20180420T035000	2018	04	20	03:50	31.5	67.1	0
20180420T035500	2018	04	20	03:55	31.5	66.4	0
20180420T040000	2018	04	20	04:00	31.5	66.3	0
20180420T040500	2018	04	20	04:05	31.5	66.4	0
20180420T041000	2018	04	20	04:10	31.5	66	0
20180420T041500	2018	04	20	04:15	31.3	66.2	0
20180420T042000	2018	04	20	04:20	31.1	66.5	0
20180420T042500	2018	04	20	04:25	31	66.8	0
20180420T043000	2018	04	20	04:30	30.9	67.8	0
20180420T043500	2018	04	20	04:35	31	67.8	0
20180420T044000	2018	04	20	04:40	31.1	68	0
20180420T044500	2018	04	20	04:45	31.3	66.9	0
20180420T045000	2018	04	20	04:50	31.3	67.1	0
20180420T045500	2018	04	20	04:55	31.1	68	0
20180420T050000	2018	04	20	05:00	31.1	67.9	0
20180420T050500	2018	04	20	05:05	31.2	67.7	0
20180420T051000	2018	04	20	05:10	31.1	68.8	0
20180420T051500	2018	04	20	05:15	31.3	67.7	0
20180420T052000	2018	04	20	05:20	31.2	68.1	0
20180420T052500	2018	04	20	05:25	31.3	68	0
20180420T053000	2018	04	20	05:30	31.4	67.9	0
20180420T053500	2018	04	20	05:35	31.5	67.3	0
20180420T054000	2018	04	20	05:40	31.5	67.4	0
20180420T054500	2018	04	20	05:45	31.5	67.2	0
20180420T055000	2018	04	20	05:50	31.5	67.3	0
20180420T055500	2018	04	20	05:55	31.5	67.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180420T060000	2018	04	20	06:00	31.5	67.4	0
20180420T060500	2018	04	20	06:05	31.5	66.9	0
20180420T061000	2018	04	20	06:10	31.5	67	0
20180420T061500	2018	04	20	06:15	31.5	66.6	0
20180420T062000	2018	04	20	06:20	31.4	67	0
20180420T062500	2018	04	20	06:25	31.4	67.9	0
20180420T063000	2018	04	20	06:30	31.4	67.8	0
20180420T063500	2018	04	20	06:35	31.4	67.7	0
20180420T064000	2018	04	20	06:40	31.4	67.8	0
20180420T064500	2018	04	20	06:45	31.5	66.6	0
20180420T065000	2018	04	20	06:50	31.4	67	0
20180420T065500	2018	04	20	06:55	31.4	67.1	0
20180420T070000	2018	04	20	07:00	31.4	67.9	0
20180420T070500	2018	04	20	07:05	31.4	67.3	0
20180420T071000	2018	04	20	07:10	31.5	66.2	0
20180420T071500	2018	04	20	07:15	31.5	66.1	0
20180420T072000	2018	04	20	07:20	31.6	65.5	0
20180420T072500	2018	04	20	07:25	31.6	65.1	0
20180420T073000	2018	04	20	07:30	31.7	64.5	0
20180420T073500	2018	04	20	07:35	31.7	64.3	0
20180420T074000	2018	04	20	07:40	31.7	64.1	0
20180420T074500	2018	04	20	07:45	31.8	64.4	0
20180420T075000	2018	04	20	07:50	31.8	64.7	0
20180420T075500	2018	04	20	07:55	31.9	64.7	0
20180420T080000	2018	04	20	08:00	31.9	64.2	0
20180420T080500	2018	04	20	08:05	31.9	63.9	0
20180420T081000	2018	04	20	08:10	32.1	64.3	0
20180420T081500	2018	04	20	08:15	32	63.4	0
20180420T082000	2018	04	20	08:20	32.4	63.6	0
20180420T082500	2018	04	20	08:25	32.6	62.8	0
20180420T083000	2018	04	20	08:30	32.7	62.4	0
20180420T083500	2018	04	20	08:35	32.6	61.9	0
20180420T084000	2018	04	20	08:40	32.5	62	0
20180420T084500	2018	04	20	08:45	32.5	61.8	0
20180420T085000	2018	04	20	08:50	32.5	61.9	0
20180420T085500	2018	04	20	08:55	32.6	62.4	0
20180420T090000	2018	04	20	09:00	32.7	62.2	0
20180420T090500	2018	04	20	09:05	33.1	62.1	0
20180420T091000	2018	04	20	09:10	33.6	61.7	0
20180420T091500	2018	04	20	09:15	33.4	61.2	0
20180420T092000	2018	04	20	09:20	33.5	61	0
20180420T092500	2018	04	20	09:25	33.6	60.9	0
20180420T093000	2018	04	20	09:30	33.4	60.5	0
20180420T093500	2018	04	20	09:35	33.5	60.5	0
20180420T094000	2018	04	20	09:40	33.5	60.6	0
20180420T094500	2018	04	20	09:45	33.9	60.8	0
20180420T095000	2018	04	20	09:50	34	60.1	0
20180420T095500	2018	04	20	09:55	34	60.4	0
20180420T100000	2018	04	20	10:00	34.1	60.2	0
20180420T100500	2018	04	20	10:05	33.9	60.5	0
20180420T101000	2018	04	20	10:10	33.8	60.3	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180420T101500	2018	04	20	10:15	34.2	60.3	0
20180420T102000	2018	04	20	10:20	35	60.2	0
20180420T102500	2018	04	20	10:25	34.7	59.6	0
20180420T103000	2018	04	20	10:30	34.7	59.4	0
20180420T103500	2018	04	20	10:35	34.8	59.3	0
20180420T104000	2018	04	20	10:40	35.4	59.2	0
20180420T104500	2018	04	20	10:45	35.2	57.5	0
20180420T105000	2018	04	20	10:50	35.5	57.5	0
20180420T105500	2018	04	20	10:55	35.2	57.1	0
20180420T110000	2018	04	20	11:00	35.5	56.8	0
20180420T110500	2018	04	20	11:05	35.6	57	0
20180420T111000	2018	04	20	11:10	36.6	57.7	0
20180420T111500	2018	04	20	11:15	36.5	56.7	0
20180420T112000	2018	04	20	11:20	37.1	56.7	0
20180420T112500	2018	04	20	11:25	36.6	56.7	0
20180420T113000	2018	04	20	11:30	37.4	56.7	0
20180420T113500	2018	04	20	11:35	37.9	56.3	0
20180420T114000	2018	04	20	11:40	36.9	56.3	0
20180420T114500	2018	04	20	11:45	36.9	56.8	0
20180420T115000	2018	04	20	11:50	38.1	56.4	0
20180420T115500	2018	04	20	11:55	37.1	55.1	0
20180420T120000	2018	04	20	12:00	38.5	55.4	0
20180420T120500	2018	04	20	12:05	38.2	55.4	0
20180420T121000	2018	04	20	12:10	38.6	55	0
20180420T121500	2018	04	20	12:15	37.6	55.3	0
20180420T122000	2018	04	20	12:20	37.3	56.2	0
20180420T122500	2018	04	20	12:25	36.9	55.5	0
20180420T123000	2018	04	20	12:30	38.1	56.4	0
20180420T123500	2018	04	20	12:35	38.5	54.9	0
20180420T124000	2018	04	20	12:40	38	54.6	0
20180420T124500	2018	04	20	12:45	37.8	55.3	0
20180420T125000	2018	04	20	12:50	37.7	55.5	0
20180420T125500	2018	04	20	12:55	37.9	55.2	0
20180420T130000	2018	04	20	13:00	38.8	54.1	0
20180420T130500	2018	04	20	13:05	38.6	53.8	0
20180420T131000	2018	04	20	13:10	38.1	54.5	0
20180420T131500	2018	04	20	13:15	38.9	54.5	0
20180420T132000	2018	04	20	13:20	38.6	53.4	0
20180420T132500	2018	04	20	13:25	38.9	54.5	0
20180420T133000	2018	04	20	13:30	38.1	54.3	0
20180420T133500	2018	04	20	13:35	38.4	54.5	0
20180420T134000	2018	04	20	13:40	38.5	54.1	0
20180420T134500	2018	04	20	13:45	38.2	54	0
20180420T135000	2018	04	20	13:50	38.8	54.2	0
20180420T135500	2018	04	20	13:55	39.1	53.5	0
20180420T140000	2018	04	20	14:00	39	53.8	0
20180420T140500	2018	04	20	14:05	39.6	53.9	0
20180420T141000	2018	04	20	14:10	39.3	53.7	0
20180420T141500	2018	04	20	14:15	39.1	53.4	0
20180420T142000	2018	04	20	14:20	40.6	53.8	0
20180420T142500	2018	04	20	14:25	41.5	53.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180420T143000	2018	04	20	14:30	41.9	52	0
20180420T143500	2018	04	20	14:35	41.9	51.8	0
20180420T144000	2018	04	20	14:40	41	50.3	0
20180420T144500	2018	04	20	14:45	39.6	51.9	0
20180420T145000	2018	04	20	14:50	40.1	52.1	0
20180420T145500	2018	04	20	14:55	40.1	53.1	0
20180420T150000	2018	04	20	15:00	40.2	53	0
20180420T150500	2018	04	20	15:05	40.1	52.2	0
20180420T151000	2018	04	20	15:10	40.4	52.3	0
20180420T151500	2018	04	20	15:15	40.1	52.6	0
20180420T152000	2018	04	20	15:20	40.2	52.9	0
20180420T152500	2018	04	20	15:25	40.4	53.5	0
20180420T153000	2018	04	20	15:30	40.5	52.2	0
20180420T153500	2018	04	20	15:35	39.9	51.6	0
20180420T154000	2018	04	20	15:40	39.7	52.6	0
20180420T154500	2018	04	20	15:45	41	52.8	0
20180420T155000	2018	04	20	15:50	41.8	51.8	0
20180420T155500	2018	04	20	15:55	40.2	52.2	0
20180420T160000	2018	04	20	16:00	40.6	50.9	0
20180420T160500	2018	04	20	16:05	42	50.6	0
20180420T161000	2018	04	20	16:10	40.3	50.6	0
20180420T161500	2018	04	20	16:15	40.6	51.8	0
20180420T162000	2018	04	20	16:20	40	52.8	0
20180420T162500	2018	04	20	16:25	40.3	53	0
20180420T163000	2018	04	20	16:30	40	54.6	0
20180420T163500	2018	04	20	16:35	39	56.7	0
20180420T164000	2018	04	20	16:40	38.8	56.1	0
20180420T164500	2018	04	20	16:45	38.6	54.8	0
20180420T165000	2018	04	20	16:50	38.5	54.4	0
20180420T165500	2018	04	20	16:55	38.2	55.3	0
20180420T170000	2018	04	20	17:00	38.1	55.8	0
20180420T170500	2018	04	20	17:05	38.2	55.3	0
20180420T171000	2018	04	20	17:10	38.2	55.6	0
20180420T171500	2018	04	20	17:15	37.9	55.5	0
20180420T172000	2018	04	20	17:20	38.1	55.8	0
20180420T172500	2018	04	20	17:25	37.9	56.1	0
20180420T173000	2018	04	20	17:30	37.8	56	0
20180420T173500	2018	04	20	17:35	37.9	56.8	0
20180420T174000	2018	04	20	17:40	37.7	56.3	0
20180420T174500	2018	04	20	17:45	37.7	57.1	0
20180420T175000	2018	04	20	17:50	37.7	57.1	0
20180420T175500	2018	04	20	17:55	37.7	57.3	0
20180420T180000	2018	04	20	18:00	37.6	57.1	0
20180420T180500	2018	04	20	18:05	37.5	57.7	0
20180420T181000	2018	04	20	18:10	37.4	57.5	0
20180420T181500	2018	04	20	18:15	37.4	58.1	0
20180420T182000	2018	04	20	18:20	37.4	58.7	0
20180420T182500	2018	04	20	18:25	37.5	58.3	0
20180420T183000	2018	04	20	18:30	37.5	58.5	0
20180420T183500	2018	04	20	18:35	37.5	58.5	0
20180420T184000	2018	04	20	18:40	37.5	58.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180420T184500	2018	04	20	18:45	37.5	57.9	0
20180420T185000	2018	04	20	18:50	37.5	58.5	0
20180420T185500	2018	04	20	18:55	37.2	61.7	0
20180420T190000	2018	04	20	19:00	37.3	64.2	0
20180420T190500	2018	04	20	19:05	37.3	63.3	0
20180420T191000	2018	04	20	19:10	36.8	63.9	0
20180420T191500	2018	04	20	19:15	36.5	65.2	0
20180420T192000	2018	04	20	19:20	36.3	65.4	0
20180420T192500	2018	04	20	19:25	36.2	65.9	0
20180420T193000	2018	04	20	19:30	36.1	66	0
20180420T193500	2018	04	20	19:35	35.9	66.5	0
20180420T194000	2018	04	20	19:40	35.9	66.5	0
20180420T194500	2018	04	20	19:45	35.8	66.9	0
20180420T195000	2018	04	20	19:50	35.7	66.9	0
20180420T195500	2018	04	20	19:55	35.5	67.2	0
20180420T200000	2018	04	20	20:00	34.9	67.9	0
20180420T200500	2018	04	20	20:05	34.6	68.8	0
20180420T201000	2018	04	20	20:10	34.1	69.8	0
20180420T201500	2018	04	20	20:15	34	69.8	0
20180420T202000	2018	04	20	20:20	33.9	70	0
20180420T202500	2018	04	20	20:25	33.3	70.4	0
20180420T203000	2018	04	20	20:30	33.4	71.8	0
20180420T203500	2018	04	20	20:35	33.7	71.7	0
20180420T204000	2018	04	20	20:40	33.6	71.8	0
20180420T204500	2018	04	20	20:45	33.6	72.2	0
20180420T205000	2018	04	20	20:50	33.7	72.3	0
20180420T205500	2018	04	20	20:55	33.8	71.8	0
20180420T210000	2018	04	20	21:00	33.6	71.7	0
20180420T210500	2018	04	20	21:05	33.6	71.5	0
20180420T211000	2018	04	20	21:10	33.6	71.6	0
20180420T211500	2018	04	20	21:15	33.5	72.3	0
20180420T212000	2018	04	20	21:20	33.4	72.7	0
20180420T212500	2018	04	20	21:25	33.2	72.7	0
20180420T213000	2018	04	20	21:30	33	73.3	0
20180420T213500	2018	04	20	21:35	32.9	73.7	0
20180420T214000	2018	04	20	21:40	33	73.7	0
20180420T214500	2018	04	20	21:45	33	73.5	0
20180420T215000	2018	04	20	21:50	32.8	73.6	0
20180420T215500	2018	04	20	21:55	32.7	73.8	0
20180420T220000	2018	04	20	22:00	32.8	73.4	0
20180420T220500	2018	04	20	22:05	33.1	73.1	0
20180420T221000	2018	04	20	22:10	33	73	0
20180420T221500	2018	04	20	22:15	33.2	72.6	0
20180420T222000	2018	04	20	22:20	33.6	71.8	0
20180420T222500	2018	04	20	22:25	34	70.5	0
20180420T223000	2018	04	20	22:30	33.7	70.4	0
20180420T223500	2018	04	20	22:35	33.6	70.4	0
20180420T224000	2018	04	20	22:40	33.4	70.3	0
20180420T224500	2018	04	20	22:45	33.5	70.7	0
20180420T225000	2018	04	20	22:50	33.5	70.3	0
20180420T225500	2018	04	20	22:55	33.6	70.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180420T230000	2018	04	20	23:00	33.5	70	0
20180420T230500	2018	04	20	23:05	33.3	70.8	0
20180420T231000	2018	04	20	23:10	33.2	71.2	0
20180420T231500	2018	04	20	23:15	33.1	71	0
20180420T232000	2018	04	20	23:20	33.2	70.5	0
20180420T232500	2018	04	20	23:25	33.3	70.3	0
20180420T233000	2018	04	20	23:30	33.4	70.4	0
20180420T233500	2018	04	20	23:35	33.6	70.1	0
20180420T234000	2018	04	20	23:40	33.7	69.7	0
20180420T234500	2018	04	20	23:45	33.8	69.6	0
20180420T235000	2018	04	20	23:50	33.9	69	0
20180420T235500	2018	04	20	23:55	34	68.8	0
20180421T000000	2018	04	21	00:00	33.9	69.1	0
20180421T000500	2018	04	21	00:05	33.9	69.4	0
20180421T001000	2018	04	21	00:10	34	69.2	0
20180421T001500	2018	04	21	00:15	34	69.2	0
20180421T002000	2018	04	21	00:20	34.2	68.6	0
20180421T002500	2018	04	21	00:25	34.3	68.1	0
20180421T003000	2018	04	21	00:30	34.2	68.1	0
20180421T003500	2018	04	21	00:35	34.2	68.4	0
20180421T004000	2018	04	21	00:40	34.3	68.2	0
20180421T004500	2018	04	21	00:45	34.2	68.1	0
20180421T005000	2018	04	21	00:50	34.1	68.3	0
20180421T005500	2018	04	21	00:55	33.9	68.5	0
20180421T010000	2018	04	21	01:00	33.7	69.2	0
20180421T010500	2018	04	21	01:05	33.8	69	0
20180421T011000	2018	04	21	01:10	33.7	69.5	0
20180421T011500	2018	04	21	01:15	33.8	69.6	0
20180421T012000	2018	04	21	01:20	33.9	69.4	0
20180421T012500	2018	04	21	01:25	33.9	69.1	0
20180421T013000	2018	04	21	01:30	33.8	69.4	0
20180421T013500	2018	04	21	01:35	33.9	69.1	0
20180421T014000	2018	04	21	01:40	33.9	69	0
20180421T014500	2018	04	21	01:45	33.9	69	0
20180421T015000	2018	04	21	01:50	33.9	68.7	0
20180421T015500	2018	04	21	01:55	33.9	68.8	0
20180421T020000	2018	04	21	02:00	33.9	68.7	0
20180421T020500	2018	04	21	02:05	33.9	68.7	0
20180421T021000	2018	04	21	02:10	33.8	68.8	0
20180421T021500	2018	04	21	02:15	33.5	69.5	0
20180421T022000	2018	04	21	02:20	33.2	69.9	0
20180421T022500	2018	04	21	02:25	33	70.5	0
20180421T023000	2018	04	21	02:30	32.7	71.1	0
20180421T023500	2018	04	21	02:35	32.5	71.6	0
20180421T024000	2018	04	21	02:40	32.5	71.6	0
20180421T024500	2018	04	21	02:45	32.3	71.8	0
20180421T025000	2018	04	21	02:50	32.1	72.2	0
20180421T025500	2018	04	21	02:55	31.8	72.8	0
20180421T030000	2018	04	21	03:00	31.8	73.5	0
20180421T030500	2018	04	21	03:05	31.7	73.4	0
20180421T031000	2018	04	21	03:10	31.4	73.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180421T031500	2018	04	21	03:15	31.2	74.6	0
20180421T032000	2018	04	21	03:20	31.1	75	0
20180421T032500	2018	04	21	03:25	30.9	75.4	0
20180421T033000	2018	04	21	03:30	30.7	75.9	0
20180421T033500	2018	04	21	03:35	30.9	75.9	0
20180421T034000	2018	04	21	03:40	30.7	75.9	0
20180421T034500	2018	04	21	03:45	30.8	76.2	0
20180421T035000	2018	04	21	03:50	30.7	76.2	0
20180421T035500	2018	04	21	03:55	30.5	76.6	0
20180421T040000	2018	04	21	04:00	30.3	77.2	0
20180421T040500	2018	04	21	04:05	30.2	77.9	0
20180421T041000	2018	04	21	04:10	30.1	78	0
20180421T041500	2018	04	21	04:15	30.2	78.2	0
20180421T042000	2018	04	21	04:20	30.3	78.2	0
20180421T042500	2018	04	21	04:25	30.1	78.5	0
20180421T043000	2018	04	21	04:30	30.1	78.8	0
20180421T043500	2018	04	21	04:35	30.2	79.1	0
20180421T044000	2018	04	21	04:40	30.3	78.8	0
20180421T044500	2018	04	21	04:45	30.3	78.9	0
20180421T045000	2018	04	21	04:50	30.2	79.1	0
20180421T045500	2018	04	21	04:55	30.1	79.4	0
20180421T050000	2018	04	21	05:00	30.1	79.9	0
20180421T050500	2018	04	21	05:05	30.2	80.1	0
20180421T051000	2018	04	21	05:10	30.2	80	0
20180421T051500	2018	04	21	05:15	30.2	80.3	0
20180421T052000	2018	04	21	05:20	30.3	80.4	0
20180421T052500	2018	04	21	05:25	30	80.5	0
20180421T053000	2018	04	21	05:30	30	80.9	0
20180421T053500	2018	04	21	05:35	29.9	81.2	0
20180421T054000	2018	04	21	05:40	29.6	81.8	0
20180421T054500	2018	04	21	05:45	29.7	82.2	0
20180421T055000	2018	04	21	05:50	29.6	82.4	0
20180421T055500	2018	04	21	05:55	29.6	82.7	0
20180421T060000	2018	04	21	06:00	29.5	83.2	0
20180421T060500	2018	04	21	06:05	29.9	83.2	0
20180421T061000	2018	04	21	06:10	30	82.7	0
20180421T061500	2018	04	21	06:15	30.1	82.9	0
20180421T062000	2018	04	21	06:20	30	83	0
20180421T062500	2018	04	21	06:25	30.2	83	0
20180421T063000	2018	04	21	06:30	30.2	82.4	0
20180421T063500	2018	04	21	06:35	30.2	82.3	0
20180421T064000	2018	04	21	06:40	30.3	82	0
20180421T064500	2018	04	21	06:45	30.6	81.7	0
20180421T065000	2018	04	21	06:50	30.7	81.2	0
20180421T065500	2018	04	21	06:55	30.9	80.8	0
20180421T070000	2018	04	21	07:00	31.1	80.4	0
20180421T070500	2018	04	21	07:05	31.3	80	0
20180421T071000	2018	04	21	07:10	31.5	79.5	0
20180421T071500	2018	04	21	07:15	31.8	78.9	0
20180421T072000	2018	04	21	07:20	32.1	78.5	0
20180421T072500	2018	04	21	07:25	32.3	78.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180421T073000	2018	04	21	07:30	32.5	77.5	0
20180421T073500	2018	04	21	07:35	33	77.4	0
20180421T074000	2018	04	21	07:40	33.1	76.5	0
20180421T074500	2018	04	21	07:45	33.2	76.5	0
20180421T075000	2018	04	21	07:50	33.5	76.3	0
20180421T075500	2018	04	21	07:55	33.8	75.8	0
20180421T080000	2018	04	21	08:00	34.3	75.5	0
20180421T080500	2018	04	21	08:05	34.6	74.6	0
20180421T081000	2018	04	21	08:10	35	73.9	0
20180421T081500	2018	04	21	08:15	35.1	73.8	0
20180421T082000	2018	04	21	08:20	35.2	72.5	0
20180421T082500	2018	04	21	08:25	35.8	72.2	0
20180421T083000	2018	04	21	08:30	35.7	71.6	0
20180421T083500	2018	04	21	08:35	36.1	70.9	0
20180421T084000	2018	04	21	08:40	36.3	70.1	0
20180421T084500	2018	04	21	08:45	36.7	70.1	0
20180421T085000	2018	04	21	08:50	37.4	69.2	0
20180421T085500	2018	04	21	08:55	37.3	68	0
20180421T090000	2018	04	21	09:00	37.8	67.4	0
20180421T090500	2018	04	21	09:05	38.1	66.4	0
20180421T091000	2018	04	21	09:10	38.6	66.6	0
20180421T091500	2018	04	21	09:15	38.8	66.6	0
20180421T092000	2018	04	21	09:20	39.3	67.3	0
20180421T092500	2018	04	21	09:25	38.8	66.7	0
20180421T093000	2018	04	21	09:30	39.4	67.8	0
20180421T093500	2018	04	21	09:35	39.5	66.7	0
20180421T094000	2018	04	21	09:40	40.2	64.9	0
20180421T094500	2018	04	21	09:45	40.7	64.3	0
20180421T095000	2018	04	21	09:50	40.7	63.6	0
20180421T095500	2018	04	21	09:55	41.2	63.7	0
20180421T100000	2018	04	21	10:00	41.1	63	0
20180421T100500	2018	04	21	10:05	41.9	63.6	0
20180421T101000	2018	04	21	10:10	42.5	60.9	0
20180421T101500	2018	04	21	10:15	42.8	60.4	0
20180421T102000	2018	04	21	10:20	43.1	60.3	0
20180421T102500	2018	04	21	10:25	43.6	60.1	0
20180421T103000	2018	04	21	10:30	44	59.1	0
20180421T103500	2018	04	21	10:35	44.1	58.4	0
20180421T104000	2018	04	21	10:40	44.6	57.5	0
20180421T104500	2018	04	21	10:45	44.5	55.4	0
20180421T105000	2018	04	21	10:50	45.3	55.1	0
20180421T105500	2018	04	21	10:55	45.8	55.2	0
20180421T110000	2018	04	21	11:00	45.8	54.2	0
20180421T110500	2018	04	21	11:05	46.6	54.4	0
20180421T111000	2018	04	21	11:10	46.9	52.4	0
20180421T111500	2018	04	21	11:15	48	42.6	0
20180421T112000	2018	04	21	11:20	47.6	36.9	0
20180421T112500	2018	04	21	11:25	47.9	36.3	0
20180421T113000	2018	04	21	11:30	48.3	35.9	0
20180421T113500	2018	04	21	11:35	48	36.5	0
20180421T114000	2018	04	21	11:40	48.2	36	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180421T114500	2018	04	21	11:45	48.9	35.8	0
20180421T115000	2018	04	21	11:50	48.6	35.1	0
20180421T115500	2018	04	21	11:55	48.9	35.2	0
20180421T120000	2018	04	21	12:00	49.5	33.7	0
20180421T120500	2018	04	21	12:05	49.5	33.8	0
20180421T121000	2018	04	21	12:10	49.7	33.4	0
20180421T121500	2018	04	21	12:15	49.7	33.1	0
20180421T122000	2018	04	21	12:20	50.1	33.5	0
20180421T122500	2018	04	21	12:25	50	30.8	0
20180421T123000	2018	04	21	12:30	50.1	31.7	0
20180421T123500	2018	04	21	12:35	51	30.5	0
20180421T124000	2018	04	21	12:40	51.2	29.2	0
20180421T124500	2018	04	21	12:45	50.6	29.2	0
20180421T125000	2018	04	21	12:50	50.9	29.5	0
20180421T125500	2018	04	21	12:55	51.1	29	0
20180421T130000	2018	04	21	13:00	51.5	28.7	0
20180421T130500	2018	04	21	13:05	51.8	27.5	0
20180421T131000	2018	04	21	13:10	51.9	26.6	0
20180421T131500	2018	04	21	13:15	52.1	27.6	0
20180421T132000	2018	04	21	13:20	52.2	27	0
20180421T132500	2018	04	21	13:25	52	25	0
20180421T133000	2018	04	21	13:30	52.5	25.1	0
20180421T133500	2018	04	21	13:35	52.4	24.6	0
20180421T134000	2018	04	21	13:40	52.1	25.4	0
20180421T134500	2018	04	21	13:45	51.6	24.9	0
20180421T135000	2018	04	21	13:50	53.2	25	0
20180421T135500	2018	04	21	13:55	52.9	24.2	0
20180421T140000	2018	04	21	14:00	52.3	24	0
20180421T140500	2018	04	21	14:05	52.8	23.5	0
20180421T141000	2018	04	21	14:10	53.8	24.2	0
20180421T141500	2018	04	21	14:15	53.3	23.5	0
20180421T142000	2018	04	21	14:20	53.5	23.8	0
20180421T142500	2018	04	21	14:25	53.7	24	0
20180421T143000	2018	04	21	14:30	54	23.4	0
20180421T143500	2018	04	21	14:35	54.7	24	0
20180421T144000	2018	04	21	14:40	54.5	24	0
20180421T144500	2018	04	21	14:45	54.5	24.3	0
20180421T145000	2018	04	21	14:50	54	22.8	0
20180421T145500	2018	04	21	14:55	54.6	22.9	0
20180421T150000	2018	04	21	15:00	53.9	23.6	0
20180421T150500	2018	04	21	15:05	54	22.5	0
20180421T151000	2018	04	21	15:10	53.7	22.4	0
20180421T151500	2018	04	21	15:15	54.4	22.9	0
20180421T152000	2018	04	21	15:20	54.6	23.3	0
20180421T152500	2018	04	21	15:25	54.4	22.8	0
20180421T153000	2018	04	21	15:30	54.3	23	0
20180421T153500	2018	04	21	15:35	53.9	22.4	0
20180421T154000	2018	04	21	15:40	54.4	22.8	0
20180421T154500	2018	04	21	15:45	54.2	23.7	0
20180421T155000	2018	04	21	15:50	54.1	23.1	0
20180421T155500	2018	04	21	15:55	54.3	22.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180421T160000	2018	04	21	16:00	54	22.7	0
20180421T160500	2018	04	21	16:05	53.6	23.7	0
20180421T161000	2018	04	21	16:10	53.7	23.6	0
20180421T161500	2018	04	21	16:15	54	23.3	0
20180421T162000	2018	04	21	16:20	54.3	24	0
20180421T162500	2018	04	21	16:25	54.6	24	0
20180421T163000	2018	04	21	16:30	54.6	23.8	0
20180421T163500	2018	04	21	16:35	53.8	22.8	0
20180421T164000	2018	04	21	16:40	54.1	24.1	0
20180421T164500	2018	04	21	16:45	54	24.1	0
20180421T165000	2018	04	21	16:50	54.2	24.1	0
20180421T165500	2018	04	21	16:55	54.1	23.3	0
20180421T170000	2018	04	21	17:00	53.8	23.3	0
20180421T170500	2018	04	21	17:05	53.8	23.4	0
20180421T171000	2018	04	21	17:10	54.1	24.3	0
20180421T171500	2018	04	21	17:15	54	24.1	0
20180421T172000	2018	04	21	17:20	53.6	23.7	0
20180421T172500	2018	04	21	17:25	53.4	24.5	0
20180421T173000	2018	04	21	17:30	53.9	25.2	0
20180421T173500	2018	04	21	17:35	53.3	24.6	0
20180421T174000	2018	04	21	17:40	53.2	24.4	0
20180421T174500	2018	04	21	17:45	53	24	0
20180421T175000	2018	04	21	17:50	53.1	24.8	0
20180421T175500	2018	04	21	17:55	52.9	25.6	0
20180421T180000	2018	04	21	18:00	52.7	25.4	0
20180421T180500	2018	04	21	18:05	52.4	24.9	0
20180421T181000	2018	04	21	18:10	52.6	24.9	0
20180421T181500	2018	04	21	18:15	52.3	24.6	0
20180421T182000	2018	04	21	18:20	52	25.6	0
20180421T182500	2018	04	21	18:25	52	26.1	0
20180421T183000	2018	04	21	18:30	51.9	26.2	0
20180421T183500	2018	04	21	18:35	51.7	27.2	0
20180421T184000	2018	04	21	18:40	51.2	26.7	0
20180421T184500	2018	04	21	18:45	51	27.2	0
20180421T185000	2018	04	21	18:50	50.8	26.9	0
20180421T185500	2018	04	21	18:55	50.6	27.9	0
20180421T190000	2018	04	21	19:00	50.5	27.7	0
20180421T190500	2018	04	21	19:05	50.2	27.9	0
20180421T191000	2018	04	21	19:10	49.8	28.4	0
20180421T191500	2018	04	21	19:15	49.4	28.7	0
20180421T192000	2018	04	21	19:20	49	29.4	0
20180421T192500	2018	04	21	19:25	48.9	29.1	0
20180421T193000	2018	04	21	19:30	48.4	30.1	0
20180421T193500	2018	04	21	19:35	48	30.5	0
20180421T194000	2018	04	21	19:40	47.6	31.1	0
20180421T194500	2018	04	21	19:45	47.5	31.4	0
20180421T195000	2018	04	21	19:50	47.4	31.4	0
20180421T195500	2018	04	21	19:55	47	31.7	0
20180421T200000	2018	04	21	20:00	46.9	31.9	0
20180421T200500	2018	04	21	20:05	46.5	32.4	0
20180421T201000	2018	04	21	20:10	46.2	32.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180421T201500	2018	04	21	20:15	45.7	33.6	0
20180421T202000	2018	04	21	20:20	45.4	33.8	0
20180421T202500	2018	04	21	20:25	45.3	34.1	0
20180421T203000	2018	04	21	20:30	45.1	34.3	0
20180421T203500	2018	04	21	20:35	45	34.4	0
20180421T204000	2018	04	21	20:40	44.6	34.7	0
20180421T204500	2018	04	21	20:45	44	35.7	0
20180421T205000	2018	04	21	20:50	43.7	36.4	0
20180421T205500	2018	04	21	20:55	43.7	36.4	0
20180421T210000	2018	04	21	21:00	43.4	36.8	0
20180421T210500	2018	04	21	21:05	43.2	37.1	0
20180421T211000	2018	04	21	21:10	43.3	37	0
20180421T211500	2018	04	21	21:15	42.9	37.6	0
20180421T212000	2018	04	21	21:20	42.8	38.1	0
20180421T212500	2018	04	21	21:25	42.9	37.9	0
20180421T213000	2018	04	21	21:30	42.9	38	0
20180421T213500	2018	04	21	21:35	42.7	38.1	0
20180421T214000	2018	04	21	21:40	42.5	38.5	0
20180421T214500	2018	04	21	21:45	42.5	38.4	0
20180421T215000	2018	04	21	21:50	42.2	38.7	0
20180421T215500	2018	04	21	21:55	42.1	39	0
20180421T220000	2018	04	21	22:00	42.1	38.9	0
20180421T220500	2018	04	21	22:05	42.3	38.2	0
20180421T221000	2018	04	21	22:10	42.1	38.5	0
20180421T221500	2018	04	21	22:15	41.8	38.9	0
20180421T222000	2018	04	21	22:20	41.5	39.4	0
20180421T222500	2018	04	21	22:25	41.9	39.1	0
20180421T223000	2018	04	21	22:30	41.3	39.4	0
20180421T223500	2018	04	21	22:35	41.2	39.9	0
20180421T224000	2018	04	21	22:40	41.2	39.9	0
20180421T224500	2018	04	21	22:45	40.8	40.6	0
20180421T225000	2018	04	21	22:50	41	40.7	0
20180421T225500	2018	04	21	22:55	41	40.4	0
20180421T230000	2018	04	21	23:00	40.8	41	0
20180421T230500	2018	04	21	23:05	40.6	41.1	0
20180421T231000	2018	04	21	23:10	40.8	41.3	0
20180421T231500	2018	04	21	23:15	40.8	40.9	0
20180421T232000	2018	04	21	23:20	40.4	41.5	0
20180421T232500	2018	04	21	23:25	40.1	42.2	0
20180421T233000	2018	04	21	23:30	39.8	42.6	0
20180421T233500	2018	04	21	23:35	39.6	43.1	0
20180421T234000	2018	04	21	23:40	39.7	42.8	0
20180421T234500	2018	04	21	23:45	39.3	43.4	0
20180421T235000	2018	04	21	23:50	38.9	44.2	0
20180421T235500	2018	04	21	23:55	39.2	44.1	0
20180422T000000	2018	04	22	00:00	39	44.2	0
20180422T000500	2018	04	22	00:05	39	44.3	0
20180422T001000	2018	04	22	00:10	39.1	44	0
20180422T001500	2018	04	22	00:15	38.9	44.5	0
20180422T002000	2018	04	22	00:20	38.6	44.6	0
20180422T002500	2018	04	22	00:25	39	44.5	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180422T003000	2018	04	22	00:30	38.9	44	0
20180422T003500	2018	04	22	00:35	37.4	47.2	0
20180422T004000	2018	04	22	00:40	36.6	48.7	0
20180422T004500	2018	04	22	00:45	36.6	48.8	0
20180422T005000	2018	04	22	00:50	36.1	49	0
20180422T005500	2018	04	22	00:55	35.8	50.4	0
20180422T010000	2018	04	22	01:00	36.7	49.6	0
20180422T010500	2018	04	22	01:05	35.7	50	0
20180422T011000	2018	04	22	01:10	35.4	50.8	0
20180422T011500	2018	04	22	01:15	32.7	53.7	0
20180422T012000	2018	04	22	01:20	34.5	54.2	0
20180422T012500	2018	04	22	01:25	33.5	53.9	0
20180422T013000	2018	04	22	01:30	31.1	59	0
20180422T013500	2018	04	22	01:35	31.7	60.2	0
20180422T014000	2018	04	22	01:40	31.6	59.9	0
20180422T014500	2018	04	22	01:45	29.5	63.2	0
20180422T015000	2018	04	22	01:50	28.5	74.5	0
20180422T015500	2018	04	22	01:55	31.5	65.5	0
20180422T020000	2018	04	22	02:00	30	65.7	0
20180422T020500	2018	04	22	02:05	30.9	68.1	0
20180422T021000	2018	04	22	02:10	31.1	61.6	0
20180422T021500	2018	04	22	02:15	28.6	67.9	0
20180422T022000	2018	04	22	02:20	29.8	68.5	0
20180422T022500	2018	04	22	02:25	28.6	73.9	0
20180422T023000	2018	04	22	02:30	27.5	80	0
20180422T023500	2018	04	22	02:35	27	80.5	0
20180422T024000	2018	04	22	02:40	27.4	80.3	0
20180422T024500	2018	04	22	02:45	27.8	78.4	0
20180422T025000	2018	04	22	02:50	27	77.1	0
20180422T025500	2018	04	22	02:55	26.5	82.6	0
20180422T030000	2018	04	22	03:00	26.1	81.9	0
20180422T030500	2018	04	22	03:05	26.3	81.7	0
20180422T031000	2018	04	22	03:10	25.7	83	0
20180422T031500	2018	04	22	03:15	25.3	84.7	0
20180422T032000	2018	04	22	03:20	25.7	85.4	0
20180422T032500	2018	04	22	03:25	26.7	83.1	0
20180422T033000	2018	04	22	03:30	26	81.9	0
20180422T033500	2018	04	22	03:35	26.6	80.7	0
20180422T034000	2018	04	22	03:40	27.4	76.6	0
20180422T034500	2018	04	22	03:45	26.5	77.1	0
20180422T035000	2018	04	22	03:50	25.7	80.5	0
20180422T035500	2018	04	22	03:55	26	80.5	0
20180422T040000	2018	04	22	04:00	25.5	80.7	0
20180422T040500	2018	04	22	04:05	24.7	82.6	0
20180422T041000	2018	04	22	04:10	24.3	83.2	0
20180422T041500	2018	04	22	04:15	24.4	83.4	0
20180422T042000	2018	04	22	04:20	24	86	0
20180422T042500	2018	04	22	04:25	24.6	86.4	0
20180422T043000	2018	04	22	04:30	24.5	82.2	0
20180422T043500	2018	04	22	04:35	23.3	82.1	0
20180422T044000	2018	04	22	04:40	23.7	85.3	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180422T044500	2018	04	22	04:45	23.8	87.6	0
20180422T045000	2018	04	22	04:50	23.4	87.3	0
20180422T045500	2018	04	22	04:55	22.8	86.3	0
20180422T050000	2018	04	22	05:00	23.5	88.5	0
20180422T050500	2018	04	22	05:05	23	88.3	0
20180422T051000	2018	04	22	05:10	23.1	87.4	0
20180422T051500	2018	04	22	05:15	23.3	87.8	0
20180422T052000	2018	04	22	05:20	23.4	87.6	0
20180422T052500	2018	04	22	05:25	23.7	88.8	0
20180422T053000	2018	04	22	05:30	24.1	91.6	0
20180422T053500	2018	04	22	05:35	23.5	91.8	0
20180422T054000	2018	04	22	05:40	22.9	90.9	0
20180422T054500	2018	04	22	05:45	23.1	91.8	0
20180422T055000	2018	04	22	05:50	23.1	91.8	0
20180422T055500	2018	04	22	05:55	23	90.5	0
20180422T060000	2018	04	22	06:00	22.8	91.4	0
20180422T060500	2018	04	22	06:05	22.8	92.5	0
20180422T061000	2018	04	22	06:10	22.6	92	0
20180422T061500	2018	04	22	06:15	22.7	92.1	0
20180422T062000	2018	04	22	06:20	22.2	91.5	0
20180422T062500	2018	04	22	06:25	22.3	91.6	0
20180422T063000	2018	04	22	06:30	23.9	91.9	0
20180422T063500	2018	04	22	06:35	23.8	89.1	0
20180422T064000	2018	04	22	06:40	24.4	89.1	0
20180422T064500	2018	04	22	06:45	25	88.4	0
20180422T065000	2018	04	22	06:50	25.8	87.8	0
20180422T065500	2018	04	22	06:55	26.7	86.2	0
20180422T070000	2018	04	22	07:00	27.7	83.2	0
20180422T070500	2018	04	22	07:05	29.6	77.8	0
20180422T071000	2018	04	22	07:10	30.2	75	0
20180422T071500	2018	04	22	07:15	30.4	75.2	0
20180422T072000	2018	04	22	07:20	31.4	73.8	0
20180422T072500	2018	04	22	07:25	32	70.7	0
20180422T073000	2018	04	22	07:30	32.6	69.5	0
20180422T073500	2018	04	22	07:35	33.4	67.6	0
20180422T074000	2018	04	22	07:40	33.7	65	0
20180422T074500	2018	04	22	07:45	33.9	66.4	0
20180422T075000	2018	04	22	07:50	34.4	62.4	0
20180422T075500	2018	04	22	07:55	34.7	62.6	0
20180422T080000	2018	04	22	08:00	35.2	63.9	0
20180422T080500	2018	04	22	08:05	36.1	62.4	0
20180422T081000	2018	04	22	08:10	36.5	59.4	0
20180422T081500	2018	04	22	08:15	36.5	57.3	0
20180422T082000	2018	04	22	08:20	37.3	56	0
20180422T082500	2018	04	22	08:25	38.1	55.1	0
20180422T083000	2018	04	22	08:30	38.4	54.7	0
20180422T083500	2018	04	22	08:35	39.1	53.7	0
20180422T084000	2018	04	22	08:40	39.6	55.7	0
20180422T084500	2018	04	22	08:45	39.5	54.3	0
20180422T085000	2018	04	22	08:50	40.1	54.3	0
20180422T085500	2018	04	22	08:55	40.3	54.5	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180422T090000	2018	04	22	09:00	40.5	56.9	0
20180422T090500	2018	04	22	09:05	40.8	56.3	0
20180422T091000	2018	04	22	09:10	41.8	53.9	0
20180422T091500	2018	04	22	09:15	42.1	51.4	0
20180422T092000	2018	04	22	09:20	43	51	0
20180422T092500	2018	04	22	09:25	43.5	50.7	0
20180422T093000	2018	04	22	09:30	43.7	49.7	0
20180422T093500	2018	04	22	09:35	44	49.3	0
20180422T094000	2018	04	22	09:40	44.6	46.7	0
20180422T094500	2018	04	22	09:45	45.3	46	0
20180422T095000	2018	04	22	09:50	45.6	45.9	0
20180422T095500	2018	04	22	09:55	45.7	45.8	0
20180422T100000	2018	04	22	10:00	46.5	45	0
20180422T100500	2018	04	22	10:05	46.4	43.7	0
20180422T101000	2018	04	22	10:10	46.5	41.5	0
20180422T101500	2018	04	22	10:15	46.9	40.4	0
20180422T102000	2018	04	22	10:20	47.6	39.2	0
20180422T102500	2018	04	22	10:25	47.9	37.5	0
20180422T103000	2018	04	22	10:30	48.2	38.7	0
20180422T103500	2018	04	22	10:35	48.3	38.4	0
20180422T104000	2018	04	22	10:40	48.7	39.2	0
20180422T104500	2018	04	22	10:45	48.5	37.2	0
20180422T105000	2018	04	22	10:50	49.9	38.9	0
20180422T105500	2018	04	22	10:55	51.4	37.4	0
20180422T110000	2018	04	22	11:00	50.8	33.9	0
20180422T110500	2018	04	22	11:05	51.3	33.9	0
20180422T111000	2018	04	22	11:10	51.1	34.8	0
20180422T111500	2018	04	22	11:15	52.3	32	0
20180422T112000	2018	04	22	11:20	52.8	30.4	0
20180422T112500	2018	04	22	11:25	52.6	31.7	0
20180422T113000	2018	04	22	11:30	52.3	30.6	0
20180422T113500	2018	04	22	11:35	53	31.2	0
20180422T114000	2018	04	22	11:40	52.9	30.4	0
20180422T114500	2018	04	22	11:45	53.2	30	0
20180422T115000	2018	04	22	11:50	53.5	29.6	0
20180422T115500	2018	04	22	11:55	54.9	30.4	0
20180422T120000	2018	04	22	12:00	55.8	29.3	0
20180422T120500	2018	04	22	12:05	55.7	28.4	0
20180422T121000	2018	04	22	12:10	56	26.7	0
20180422T121500	2018	04	22	12:15	55.1	27.4	0
20180422T122000	2018	04	22	12:20	54.9	27.4	0
20180422T122500	2018	04	22	12:25	56	28	0
20180422T123000	2018	04	22	12:30	56.8	27.2	0
20180422T123500	2018	04	22	12:35	56.7	24.8	0
20180422T124000	2018	04	22	12:40	56.9	26.6	0
20180422T124500	2018	04	22	12:45	56.4	25.8	0
20180422T125000	2018	04	22	12:50	56.3	26.1	0
20180422T125500	2018	04	22	12:55	56.3	26.2	0
20180422T130000	2018	04	22	13:00	56.6	25.1	0
20180422T130500	2018	04	22	13:05	56.7	24.7	0
20180422T131000	2018	04	22	13:10	57.4	25.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180422T131500	2018	04	22	13:15	57.2	24.7	0
20180422T132000	2018	04	22	13:20	57.8	26.3	0
20180422T132500	2018	04	22	13:25	57.2	25.8	0
20180422T133000	2018	04	22	13:30	58.3	20.3	0
20180422T133500	2018	04	22	13:35	57.8	16.6	0
20180422T134000	2018	04	22	13:40	57.8	16.3	0
20180422T134500	2018	04	22	13:45	58.3	17.1	0
20180422T135000	2018	04	22	13:50	58	17	0
20180422T135500	2018	04	22	13:55	58.7	16.9	0
20180422T140000	2018	04	22	14:00	57.6	15.3	0
20180422T140500	2018	04	22	14:05	59	15.6	0
20180422T141000	2018	04	22	14:10	58.6	15.6	0
20180422T141500	2018	04	22	14:15	59	16	0
20180422T142000	2018	04	22	14:20	58.9	15.1	0
20180422T142500	2018	04	22	14:25	58.7	15.6	0
20180422T143000	2018	04	22	14:30	58.8	15	0
20180422T143500	2018	04	22	14:35	58.9	14.8	0
20180422T144000	2018	04	22	14:40	58.3	14.7	0
20180422T144500	2018	04	22	14:45	58.8	14.3	0
20180422T145000	2018	04	22	14:50	59.2	13.5	0
20180422T145500	2018	04	22	14:55	60.2	14.9	0
20180422T150000	2018	04	22	15:00	59.2	14.4	0
20180422T150500	2018	04	22	15:05	59.3	15	0
20180422T151000	2018	04	22	15:10	59.2	14.6	0
20180422T151500	2018	04	22	15:15	59.2	14.5	0
20180422T152000	2018	04	22	15:20	59.1	15.3	0
20180422T152500	2018	04	22	15:25	60	15.6	0
20180422T153000	2018	04	22	15:30	59.9	15.6	0
20180422T153500	2018	04	22	15:35	59.6	14.4	0
20180422T154000	2018	04	22	15:40	60.2	13.9	0
20180422T154500	2018	04	22	15:45	60	14.6	0
20180422T155000	2018	04	22	15:50	59.3	14.4	0
20180422T155500	2018	04	22	15:55	59.6	14.4	0
20180422T160000	2018	04	22	16:00	60	13.9	0
20180422T160500	2018	04	22	16:05	59.7	13	0
20180422T161000	2018	04	22	16:10	59.3	14.1	0
20180422T161500	2018	04	22	16:15	59.4	13.5	0
20180422T162000	2018	04	22	16:20	59	13.4	0
20180422T162500	2018	04	22	16:25	59.9	14.3	0
20180422T163000	2018	04	22	16:30	60.1	14.5	0
20180422T163500	2018	04	22	16:35	59.4	13.9	0
20180422T164000	2018	04	22	16:40	59.2	13.3	0
20180422T164500	2018	04	22	16:45	59.5	13.1	0
20180422T165000	2018	04	22	16:50	60.2	14	0
20180422T165500	2018	04	22	16:55	59.1	13.7	0
20180422T170000	2018	04	22	17:00	59.3	13	0
20180422T170500	2018	04	22	17:05	59.6	13.4	0
20180422T171000	2018	04	22	17:10	59.4	13.2	0
20180422T171500	2018	04	22	17:15	59.6	13.3	0
20180422T172000	2018	04	22	17:20	60	14	0
20180422T172500	2018	04	22	17:25	59.7	13.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180422T173000	2018	04	22	17:30	59.5	14	0
20180422T173500	2018	04	22	17:35	59.3	13.6	0
20180422T174000	2018	04	22	17:40	59	13	0
20180422T174500	2018	04	22	17:45	58.8	13.4	0
20180422T175000	2018	04	22	17:50	59	12.8	0
20180422T175500	2018	04	22	17:55	58.6	13.3	0
20180422T180000	2018	04	22	18:00	58.7	13.1	0
20180422T180500	2018	04	22	18:05	59.1	13.9	0
20180422T181000	2018	04	22	18:10	58.8	13.8	0
20180422T181500	2018	04	22	18:15	58.7	14.2	0
20180422T182000	2018	04	22	18:20	58.4	14.1	0
20180422T182500	2018	04	22	18:25	58.4	14.6	0
20180422T183000	2018	04	22	18:30	58.1	14.6	0
20180422T183500	2018	04	22	18:35	58.2	14.1	0
20180422T184000	2018	04	22	18:40	57.9	14.5	0
20180422T184500	2018	04	22	18:45	57.8	14.4	0
20180422T185000	2018	04	22	18:50	57.7	14.6	0
20180422T185500	2018	04	22	18:55	57.4	15.2	0
20180422T190000	2018	04	22	19:00	57	15.2	0
20180422T190500	2018	04	22	19:05	56.6	14.9	0
20180422T191000	2018	04	22	19:10	56.8	14.4	0
20180422T191500	2018	04	22	19:15	56.3	14.6	0
20180422T192000	2018	04	22	19:20	55.6	15.2	0
20180422T192500	2018	04	22	19:25	55	16	0
20180422T193000	2018	04	22	19:30	54.6	16.5	0
20180422T193500	2018	04	22	19:35	54.5	16.2	0
20180422T194000	2018	04	22	19:40	53.5	16.3	0
20180422T194500	2018	04	22	19:45	52.6	16.7	0
20180422T195000	2018	04	22	19:50	52.3	16.7	0
20180422T195500	2018	04	22	19:55	51.2	17.3	0
20180422T200000	2018	04	22	20:00	48.4	19.4	0
20180422T200500	2018	04	22	20:05	45.5	23.6	0
20180422T201000	2018	04	22	20:10	43.9	28.5	0
20180422T201500	2018	04	22	20:15	44.3	29.6	0
20180422T202000	2018	04	22	20:20	43.7	30.4	0
20180422T202500	2018	04	22	20:25	42.6	32.4	0
20180422T203000	2018	04	22	20:30	42	32	0
20180422T203500	2018	04	22	20:35	41.1	34.3	0
20180422T204000	2018	04	22	20:40	41	34.3	0
20180422T204500	2018	04	22	20:45	38.9	40.1	0
20180422T205000	2018	04	22	20:50	39.5	46.9	0
20180422T205500	2018	04	22	20:55	41.2	38.6	0
20180422T210000	2018	04	22	21:00	40.6	38.5	0
20180422T210500	2018	04	22	21:05	38.9	42.2	0
20180422T211000	2018	04	22	21:10	39	43.2	0
20180422T211500	2018	04	22	21:15	38.7	42.7	0
20180422T212000	2018	04	22	21:20	37.5	47.8	0
20180422T212500	2018	04	22	21:25	38.8	52.7	0
20180422T213000	2018	04	22	21:30	35.8	54.7	0
20180422T213500	2018	04	22	21:35	36.2	60.5	0
20180422T214000	2018	04	22	21:40	35.7	62.5	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180422T214500	2018	04	22	21:45	34.3	67	0
20180422T215000	2018	04	22	21:50	34.7	64.8	0
20180422T215500	2018	04	22	21:55	36.5	64.1	0
20180422T220000	2018	04	22	22:00	34.3	67.6	0
20180422T220500	2018	04	22	22:05	34.2	66.2	0
20180422T221000	2018	04	22	22:10	34	68.7	0
20180422T221500	2018	04	22	22:15	34.4	63.8	0
20180422T222000	2018	04	22	22:20	34	70.7	0
20180422T222500	2018	04	22	22:25	34.4	65	0
20180422T223000	2018	04	22	22:30	34.8	59	0
20180422T223500	2018	04	22	22:35	33.3	60.4	0
20180422T224000	2018	04	22	22:40	33.2	61.5	0
20180422T224500	2018	04	22	22:45	33.9	61.2	0
20180422T225000	2018	04	22	22:50	37.1	46.5	0
20180422T225500	2018	04	22	22:55	38	39.3	0
20180422T230000	2018	04	22	23:00	36	46.2	0
20180422T230500	2018	04	22	23:05	34.1	48.7	0
20180422T231000	2018	04	22	23:10	32.8	56.1	0
20180422T231500	2018	04	22	23:15	32.7	56.9	0
20180422T232000	2018	04	22	23:20	33.4	61	0
20180422T232500	2018	04	22	23:25	34.2	56.8	0
20180422T233000	2018	04	22	23:30	33.2	64	0
20180422T233500	2018	04	22	23:35	32.6	71.1	0
20180422T234000	2018	04	22	23:40	31.9	75.3	0
20180422T234500	2018	04	22	23:45	30.8	77	0
20180422T235000	2018	04	22	23:50	31.7	71.6	0
20180422T235500	2018	04	22	23:55	31.3	71.2	0
20180423T000000	2018	04	23	00:00	31.6	69.1	0
20180423T000500	2018	04	23	00:05	30.4	69.5	0
20180423T001000	2018	04	23	00:10	29.4	71.8	0
20180423T001500	2018	04	23	00:15	29.7	75.1	0
20180423T002000	2018	04	23	00:20	29.7	78.4	0
20180423T002500	2018	04	23	00:25	29.6	74.9	0
20180423T003000	2018	04	23	00:30	30.2	81	0
20180423T003500	2018	04	23	00:35	30	83.1	0
20180423T004000	2018	04	23	00:40	29.9	81.8	0
20180423T004500	2018	04	23	00:45	30.2	74.1	0
20180423T005000	2018	04	23	00:50	28.7	72.3	0
20180423T005500	2018	04	23	00:55	28.5	75.2	0
20180423T010000	2018	04	23	01:00	28.4	72.8	0
20180423T010500	2018	04	23	01:05	28.6	75.7	0
20180423T011000	2018	04	23	01:10	29	78.5	0
20180423T011500	2018	04	23	01:15	29.6	84.1	0
20180423T012000	2018	04	23	01:20	28.8	78.8	0
20180423T012500	2018	04	23	01:25	29.1	73.4	0
20180423T013000	2018	04	23	01:30	29.8	74.7	0
20180423T013500	2018	04	23	01:35	28.8	80.3	0
20180423T014000	2018	04	23	01:40	27.9	81.4	0
20180423T014500	2018	04	23	01:45	27.8	80.9	0
20180423T015000	2018	04	23	01:50	28.4	76.1	0
20180423T015500	2018	04	23	01:55	28.3	76.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180423T020000	2018	04	23	02:00	28.3	76.7	0
20180423T020500	2018	04	23	02:05	30.6	66.3	0
20180423T021000	2018	04	23	02:10	32.7	55.9	0
20180423T021500	2018	04	23	02:15	33.4	52.7	0
20180423T022000	2018	04	23	02:20	32.1	56.9	0
20180423T022500	2018	04	23	02:25	33.1	55	0
20180423T023000	2018	04	23	02:30	34.6	49.6	0
20180423T023500	2018	04	23	02:35	33.6	50.5	0
20180423T024000	2018	04	23	02:40	32.9	54.1	0
20180423T024500	2018	04	23	02:45	33.2	54.3	0
20180423T025000	2018	04	23	02:50	33.8	52.8	0
20180423T025500	2018	04	23	02:55	33.5	52.4	0
20180423T030000	2018	04	23	03:00	33.5	53.3	0
20180423T030500	2018	04	23	03:05	33.8	53.4	0
20180423T031000	2018	04	23	03:10	33.2	54.1	0
20180423T031500	2018	04	23	03:15	31.9	57.1	0
20180423T032000	2018	04	23	03:20	32.2	58	0
20180423T032500	2018	04	23	03:25	32.7	58.2	0
20180423T033000	2018	04	23	03:30	32.6	58	0
20180423T033500	2018	04	23	03:35	32.4	58.3	0
20180423T034000	2018	04	23	03:40	29.3	67.6	0
20180423T034500	2018	04	23	03:45	28.9	69.3	0
20180423T035000	2018	04	23	03:50	28	68.4	0
20180423T035500	2018	04	23	03:55	29.6	69.9	0
20180423T040000	2018	04	23	04:00	29.5	71.3	0
20180423T040500	2018	04	23	04:05	28.9	72.4	0
20180423T041000	2018	04	23	04:10	29.5	70.7	0
20180423T041500	2018	04	23	04:15	30	67.2	0
20180423T042000	2018	04	23	04:20	30.3	65.2	0
20180423T042500	2018	04	23	04:25	30	65.1	0
20180423T043000	2018	04	23	04:30	29.9	66.5	0
20180423T043500	2018	04	23	04:35	29.8	67.2	0
20180423T044000	2018	04	23	04:40	29.8	66.6	0
20180423T044500	2018	04	23	04:45	29.9	66	0
20180423T045000	2018	04	23	04:50	29.8	65.7	0
20180423T045500	2018	04	23	04:55	29.4	66.4	0
20180423T050000	2018	04	23	05:00	29.3	66.8	0
20180423T050500	2018	04	23	05:05	29.3	66.7	0
20180423T051000	2018	04	23	05:10	28.1	72.8	0
20180423T051500	2018	04	23	05:15	26.9	77.1	0
20180423T052000	2018	04	23	05:20	26.9	78.6	0
20180423T052500	2018	04	23	05:25	27.9	74.9	0
20180423T053000	2018	04	23	05:30	28.3	71.8	0
20180423T053500	2018	04	23	05:35	28.6	70.4	0
20180423T054000	2018	04	23	05:40	28.9	69.4	0
20180423T054500	2018	04	23	05:45	28.7	69.8	0
20180423T055000	2018	04	23	05:50	28.6	69.5	0
20180423T055500	2018	04	23	05:55	28.7	69.4	0
20180423T060000	2018	04	23	06:00	28.4	69.1	0
20180423T060500	2018	04	23	06:05	27.9	72.1	0
20180423T061000	2018	04	23	06:10	27.9	72.7	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180423T061500	2018	04	23	06:15	27.9	73.1	0
20180423T062000	2018	04	23	06:20	27.7	74.2	0
20180423T062500	2018	04	23	06:25	28.2	71.8	0
20180423T063000	2018	04	23	06:30	28.9	69.5	0
20180423T063500	2018	04	23	06:35	29.9	66.5	0
20180423T064000	2018	04	23	06:40	29.3	66	0
20180423T064500	2018	04	23	06:45	28.5	68	0
20180423T065000	2018	04	23	06:50	29.1	70.2	0
20180423T065500	2018	04	23	06:55	29.2	70.2	0
20180423T070000	2018	04	23	07:00	30.2	66.3	0
20180423T070500	2018	04	23	07:05	31	65.5	0
20180423T071000	2018	04	23	07:10	32.2	63.6	0
20180423T071500	2018	04	23	07:15	32.8	62.2	0
20180423T072000	2018	04	23	07:20	33.1	61.7	0
20180423T072500	2018	04	23	07:25	33.5	62.1	0
20180423T073000	2018	04	23	07:30	33.9	61	0
20180423T073500	2018	04	23	07:35	34.5	61	0
20180423T074000	2018	04	23	07:40	34.7	59.6	0
20180423T074500	2018	04	23	07:45	35.3	59.9	0
20180423T075000	2018	04	23	07:50	35.7	57	0
20180423T075500	2018	04	23	07:55	36.3	56.8	0
20180423T080000	2018	04	23	08:00	36.7	55.5	0
20180423T080500	2018	04	23	08:05	37.4	54.5	0
20180423T081000	2018	04	23	08:10	38.2	54	0
20180423T081500	2018	04	23	08:15	38.5	53.2	0
20180423T082000	2018	04	23	08:20	39.3	52.3	0
20180423T082500	2018	04	23	08:25	39.7	50.9	0
20180423T083000	2018	04	23	08:30	40.3	50.9	0
20180423T083500	2018	04	23	08:35	40.9	50	0
20180423T084000	2018	04	23	08:40	41.6	49.8	0
20180423T084500	2018	04	23	08:45	41.4	48.6	0
20180423T085000	2018	04	23	08:50	42.2	47.5	0
20180423T085500	2018	04	23	08:55	42.9	48	0
20180423T090000	2018	04	23	09:00	43.4	48.2	0
20180423T090500	2018	04	23	09:05	43.1	49.3	0
20180423T091000	2018	04	23	09:10	44.1	46.5	0
20180423T091500	2018	04	23	09:15	46	43.6	0
20180423T092000	2018	04	23	09:20	47.5	38.7	0
20180423T092500	2018	04	23	09:25	47.7	37.2	0
20180423T093000	2018	04	23	09:30	48.1	36.5	0
20180423T093500	2018	04	23	09:35	48.9	37.7	0
20180423T094000	2018	04	23	09:40	48.8	33.8	0
20180423T094500	2018	04	23	09:45	49.1	34.8	0
20180423T095000	2018	04	23	09:50	50.2	34.5	0
20180423T095500	2018	04	23	09:55	50.6	33.9	0
20180423T100000	2018	04	23	10:00	51.6	32.7	0
20180423T100500	2018	04	23	10:05	51.3	32	0
20180423T101000	2018	04	23	10:10	52.3	30.6	0
20180423T101500	2018	04	23	10:15	52.2	33	0
20180423T102000	2018	04	23	10:20	53.1	31.6	0
20180423T102500	2018	04	23	10:25	52.5	31.1	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180423T103000	2018	04	23	10:30	53.3	27.6	0
20180423T103500	2018	04	23	10:35	53.5	28.5	0
20180423T104000	2018	04	23	10:40	54.3	27.3	0
20180423T104500	2018	04	23	10:45	54.7	28	0
20180423T105000	2018	04	23	10:50	54.5	25.3	0
20180423T105500	2018	04	23	10:55	55	25.8	0
20180423T110000	2018	04	23	11:00	55.3	25.1	0
20180423T110500	2018	04	23	11:05	55.1	23.8	0
20180423T111000	2018	04	23	11:10	55.1	22.8	0
20180423T111500	2018	04	23	11:15	55.9	23.4	0
20180423T112000	2018	04	23	11:20	55.4	22.1	0
20180423T112500	2018	04	23	11:25	55.6	22	0
20180423T113000	2018	04	23	11:30	56.3	22.3	0
20180423T113500	2018	04	23	11:35	55.5	21.6	0
20180423T114000	2018	04	23	11:40	55.6	22.3	0
20180423T114500	2018	04	23	11:45	55.3	20.7	0
20180423T115000	2018	04	23	11:50	56.5	22.1	0
20180423T115500	2018	04	23	11:55	56.2	20.8	0
20180423T120000	2018	04	23	12:00	57.1	19.7	0
20180423T120500	2018	04	23	12:05	58.2	20.6	0
20180423T121000	2018	04	23	12:10	57.2	18.5	0
20180423T121500	2018	04	23	12:15	58.3	19.5	0
20180423T122000	2018	04	23	12:20	57.8	20	0
20180423T122500	2018	04	23	12:25	57.5	20.5	0
20180423T123000	2018	04	23	12:30	58.1	20.7	0
20180423T123500	2018	04	23	12:35	59.2	19.5	0
20180423T124000	2018	04	23	12:40	58.1	20.3	0
20180423T124500	2018	04	23	12:45	59.9	20.7	0
20180423T125000	2018	04	23	12:50	59.6	18.8	0
20180423T125500	2018	04	23	12:55	58.8	18.8	0
20180423T130000	2018	04	23	13:00	58.7	18.2	0
20180423T130500	2018	04	23	13:05	60.5	19.5	0
20180423T131000	2018	04	23	13:10	59.7	17.6	0
20180423T131500	2018	04	23	13:15	59.2	18.6	0
20180423T132000	2018	04	23	13:20	60.8	20	0
20180423T132500	2018	04	23	13:25	60.9	20	0
20180423T133000	2018	04	23	13:30	61.4	20.4	0
20180423T133500	2018	04	23	13:35	61.3	19.3	0
20180423T134000	2018	04	23	13:40	61.4	18.3	0
20180423T134500	2018	04	23	13:45	61.3	18.3	0
20180423T135000	2018	04	23	13:50	61.8	19	0
20180423T135500	2018	04	23	13:55	62.3	18.5	0
20180423T140000	2018	04	23	14:00	62	17.9	0
20180423T140500	2018	04	23	14:05	61.8	17.9	0
20180423T141000	2018	04	23	14:10	62.3	17.5	0
20180423T141500	2018	04	23	14:15	63.3	18.3	0
20180423T142000	2018	04	23	14:20	63.1	17.7	0
20180423T142500	2018	04	23	14:25	62.6	16.5	0
20180423T143000	2018	04	23	14:30	62.7	17.1	0
20180423T143500	2018	04	23	14:35	63.5	17.3	0
20180423T144000	2018	04	23	14:40	63.6	17	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180423T144500	2018	04	23	14:45	63.2	17.8	0
20180423T145000	2018	04	23	14:50	63.5	16.9	0
20180423T145500	2018	04	23	14:55	63	14.9	0
20180423T150000	2018	04	23	15:00	63.6	16.4	0
20180423T150500	2018	04	23	15:05	64.8	16.8	0
20180423T151000	2018	04	23	15:10	64.6	16.8	0
20180423T151500	2018	04	23	15:15	64.3	16.5	0
20180423T152000	2018	04	23	15:20	64.3	17.7	0
20180423T152500	2018	04	23	15:25	64.9	17.9	0
20180423T153000	2018	04	23	15:30	65.2	18.2	0
20180423T153500	2018	04	23	15:35	65	17.3	0
20180423T154000	2018	04	23	15:40	64.8	17.9	0
20180423T154500	2018	04	23	15:45	64.9	18.5	0
20180423T155000	2018	04	23	15:50	64.8	17.7	0
20180423T155500	2018	04	23	15:55	65.3	17.7	0
20180423T160000	2018	04	23	16:00	65.3	17.5	0
20180423T160500	2018	04	23	16:05	66.1	18.5	0
20180423T161000	2018	04	23	16:10	66	18	0
20180423T161500	2018	04	23	16:15	65.8	18	0
20180423T162000	2018	04	23	16:20	65.2	18.1	0
20180423T162500	2018	04	23	16:25	66	17.7	0
20180423T163000	2018	04	23	16:30	65.6	17.5	0
20180423T163500	2018	04	23	16:35	66	17.5	0
20180423T164000	2018	04	23	16:40	66.2	17.7	0
20180423T164500	2018	04	23	16:45	66.2	17.9	0
20180423T165000	2018	04	23	16:50	66.1	17.6	0
20180423T165500	2018	04	23	16:55	65.9	17.3	0
20180423T170000	2018	04	23	17:00	66.2	17.5	0
20180423T170500	2018	04	23	17:05	66.2	17.5	0
20180423T171000	2018	04	23	17:10	65.9	17.1	0
20180423T171500	2018	04	23	17:15	66.3	17.4	0
20180423T172000	2018	04	23	17:20	66.2	17.1	0
20180423T172500	2018	04	23	17:25	65.9	16.7	0
20180423T173000	2018	04	23	17:30	66.1	16.8	0
20180423T173500	2018	04	23	17:35	66.2	17.3	0
20180423T174000	2018	04	23	17:40	65.8	16.8	0
20180423T174500	2018	04	23	17:45	65.6	16.8	0
20180423T175000	2018	04	23	17:50	65.7	16.8	0
20180423T175500	2018	04	23	17:55	65.8	17	0
20180423T180000	2018	04	23	18:00	65.3	16.5	0
20180423T180500	2018	04	23	18:05	65.5	16.8	0
20180423T181000	2018	04	23	18:10	65.5	16.7	0
20180423T181500	2018	04	23	18:15	65.2	16.4	0
20180423T182000	2018	04	23	18:20	65.3	16.3	0
20180423T182500	2018	04	23	18:25	65	17	0
20180423T183000	2018	04	23	18:30	64.9	16.6	0
20180423T183500	2018	04	23	18:35	65	17.2	0
20180423T184000	2018	04	23	18:40	65	16.6	0
20180423T184500	2018	04	23	18:45	64.8	16.8	0
20180423T185000	2018	04	23	18:50	64.3	16.6	0
20180423T185500	2018	04	23	18:55	64.1	16.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180423T190000	2018	04	23	19:00	63.8	17.6	0
20180423T190500	2018	04	23	19:05	63.8	16.4	0
20180423T191000	2018	04	23	19:10	63.7	16.3	0
20180423T191500	2018	04	23	19:15	63.4	16.3	0
20180423T192000	2018	04	23	19:20	63	16.5	0
20180423T192500	2018	04	23	19:25	62.5	16.8	0
20180423T193000	2018	04	23	19:30	62.1	16.5	0
20180423T193500	2018	04	23	19:35	61.7	16.7	0
20180423T194000	2018	04	23	19:40	61	17.3	0
20180423T194500	2018	04	23	19:45	60.2	18.1	0
20180423T195000	2018	04	23	19:50	59.5	18.9	0
20180423T195500	2018	04	23	19:55	58.3	19.4	0
20180423T200000	2018	04	23	20:00	55.6	23.6	0
20180423T200500	2018	04	23	20:05	52.8	30.2	0
20180423T201000	2018	04	23	20:10	52.1	28.9	0
20180423T201500	2018	04	23	20:15	53.4	25.9	0
20180423T202000	2018	04	23	20:20	54.1	24.2	0
20180423T202500	2018	04	23	20:25	53.5	24.7	0
20180423T203000	2018	04	23	20:30	53.1	24.1	0
20180423T203500	2018	04	23	20:35	53.5	25.1	0
20180423T204000	2018	04	23	20:40	51.5	26.8	0
20180423T204500	2018	04	23	20:45	51.6	26.8	0
20180423T205000	2018	04	23	20:50	51.9	26.7	0
20180423T205500	2018	04	23	20:55	52	26.3	0
20180423T210000	2018	04	23	21:00	54.6	22	0
20180423T210500	2018	04	23	21:05	56.2	20	0
20180423T211000	2018	04	23	21:10	57.2	19.1	0
20180423T211500	2018	04	23	21:15	57.1	19	0
20180423T212000	2018	04	23	21:20	56.3	19.6	0
20180423T212500	2018	04	23	21:25	55.9	19.8	0
20180423T213000	2018	04	23	21:30	56.2	19.8	0
20180423T213500	2018	04	23	21:35	56.3	19.5	0
20180423T214000	2018	04	23	21:40	54.5	20.8	0
20180423T214500	2018	04	23	21:45	51.6	23.8	0
20180423T215000	2018	04	23	21:50	47.1	31.3	0
20180423T215500	2018	04	23	21:55	50	29.6	0
20180423T220000	2018	04	23	22:00	47.4	32.2	0
20180423T220500	2018	04	23	22:05	45.1	38.2	0
20180423T221000	2018	04	23	22:10	44.3	40.5	0
20180423T221500	2018	04	23	22:15	45	37.3	0
20180423T222000	2018	04	23	22:20	44.9	40.2	0
20180423T222500	2018	04	23	22:25	44.8	43.7	0
20180423T223000	2018	04	23	22:30	44.1	44.7	0
20180423T223500	2018	04	23	22:35	43.5	49.2	0
20180423T224000	2018	04	23	22:40	41.7	48.3	0
20180423T224500	2018	04	23	22:45	40.5	59.4	0
20180423T225000	2018	04	23	22:50	41.9	52.8	0
20180423T225500	2018	04	23	22:55	39.9	56.7	0
20180423T230000	2018	04	23	23:00	41	53.6	0
20180423T230500	2018	04	23	23:05	39	58	0
20180423T231000	2018	04	23	23:10	39.1	62.5	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180423T231500	2018	04	23	23:15	39.1	62.3	0
20180423T232000	2018	04	23	23:20	39.7	58.2	0
20180423T232500	2018	04	23	23:25	40.2	57.8	0
20180423T233000	2018	04	23	23:30	39.7	59.8	0
20180423T233500	2018	04	23	23:35	38.8	58.7	0
20180423T234000	2018	04	23	23:40	39.8	56.9	0
20180423T234500	2018	04	23	23:45	39.4	55.7	0
20180423T235000	2018	04	23	23:50	39.4	56.6	0
20180423T235500	2018	04	23	23:55	38.2	59.2	0
20180424T000000	2018	04	24	00:00	38.3	59.5	0
20180424T000500	2018	04	24	00:05	38.4	58.4	0
20180424T001000	2018	04	24	00:10	38.9	57.6	0
20180424T001500	2018	04	24	00:15	38.3	59.8	0
20180424T002000	2018	04	24	00:20	38.4	59.4	0
20180424T002500	2018	04	24	00:25	38.6	58	0
20180424T003000	2018	04	24	00:30	37.7	63.7	0
20180424T003500	2018	04	24	00:35	37.3	61.7	0
20180424T004000	2018	04	24	00:40	38.2	58.8	0
20180424T004500	2018	04	24	00:45	37.3	58.9	0
20180424T005000	2018	04	24	00:50	37	62.8	0
20180424T005500	2018	04	24	00:55	38.4	58.6	0
20180424T010000	2018	04	24	01:00	36.5	67.5	0
20180424T010500	2018	04	24	01:05	36.9	64.3	0
20180424T011000	2018	04	24	01:10	36.9	62.5	0
20180424T011500	2018	04	24	01:15	37.4	60.3	0
20180424T012000	2018	04	24	01:20	37.1	62.4	0
20180424T012500	2018	04	24	01:25	36.6	64	0
20180424T013000	2018	04	24	01:30	36.4	66	0
20180424T013500	2018	04	24	01:35	36.4	65	0
20180424T014000	2018	04	24	01:40	35.6	68.6	0
20180424T014500	2018	04	24	01:45	36.6	64	0
20180424T015000	2018	04	24	01:50	36.6	61.6	0
20180424T015500	2018	04	24	01:55	38.8	55.9	0
20180424T020000	2018	04	24	02:00	36.8	62.4	0
20180424T020500	2018	04	24	02:05	36.4	65.3	0
20180424T021000	2018	04	24	02:10	36.2	67.4	0
20180424T021500	2018	04	24	02:15	36.3	65.9	0
20180424T022000	2018	04	24	02:20	35.5	69.8	0
20180424T022500	2018	04	24	02:25	35.6	66.8	0
20180424T023000	2018	04	24	02:30	35	69.3	0
20180424T023500	2018	04	24	02:35	35.6	70.4	0
20180424T024000	2018	04	24	02:40	36.4	66.4	0
20180424T024500	2018	04	24	02:45	34.8	71.6	0
20180424T025000	2018	04	24	02:50	35.9	69.6	0
20180424T025500	2018	04	24	02:55	35.5	72.5	0
20180424T030000	2018	04	24	03:00	36.2	66.7	0
20180424T030500	2018	04	24	03:05	35.3	70.3	0
20180424T031000	2018	04	24	03:10	35.2	71.5	0
20180424T031500	2018	04	24	03:15	34.2	72.6	0
20180424T032000	2018	04	24	03:20	35.1	69.8	0
20180424T032500	2018	04	24	03:25	34.9	71.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180424T033000	2018	04	24	03:30	33.9	73.3	0
20180424T033500	2018	04	24	03:35	33.4	75.3	0
20180424T034000	2018	04	24	03:40	33.5	78	0
20180424T034500	2018	04	24	03:45	33.1	78.1	0
20180424T035000	2018	04	24	03:50	33	78.9	0
20180424T035500	2018	04	24	03:55	32.9	77.7	0
20180424T040000	2018	04	24	04:00	32.5	80.9	0
20180424T040500	2018	04	24	04:05	32.7	81	0
20180424T041000	2018	04	24	04:10	32.9	78.6	0
20180424T041500	2018	04	24	04:15	32.9	80.2	0
20180424T042000	2018	04	24	04:20	33.1	78.2	0
20180424T042500	2018	04	24	04:25	32	81.3	0
20180424T043000	2018	04	24	04:30	32.7	81.9	0
20180424T043500	2018	04	24	04:35	33.3	79.9	0
20180424T044000	2018	04	24	04:40	32.5	81.8	0
20180424T044500	2018	04	24	04:45	31.9	81.3	0
20180424T045000	2018	04	24	04:50	32.2	82.3	0
20180424T045500	2018	04	24	04:55	31.7	83.7	0
20180424T050000	2018	04	24	05:00	31.4	82.2	0
20180424T050500	2018	04	24	05:05	31.4	81.2	0
20180424T051000	2018	04	24	05:10	31.3	82.4	0
20180424T051500	2018	04	24	05:15	30.5	86.9	0
20180424T052000	2018	04	24	05:20	30.6	84.9	0
20180424T052500	2018	04	24	05:25	30.3	85.9	0
20180424T053000	2018	04	24	05:30	32	83.7	0
20180424T053500	2018	04	24	05:35	31.2	84.9	0
20180424T054000	2018	04	24	05:40	30.4	84.8	0
20180424T054500	2018	04	24	05:45	30	86.1	0
20180424T055000	2018	04	24	05:50	29.9	86.9	0
20180424T055500	2018	04	24	05:55	30	88	0
20180424T060000	2018	04	24	06:00	30.5	86.6	0
20180424T060500	2018	04	24	06:05	30.1	87.8	0
20180424T061000	2018	04	24	06:10	30.1	89.1	0
20180424T061500	2018	04	24	06:15	30.3	88.5	0
20180424T062000	2018	04	24	06:20	30.1	89.1	0
20180424T062500	2018	04	24	06:25	30.4	85.8	0
20180424T063000	2018	04	24	06:30	30.9	85.3	0
20180424T063500	2018	04	24	06:35	30.9	84.3	0
20180424T064000	2018	04	24	06:40	31.5	81.6	0
20180424T064500	2018	04	24	06:45	32	79.6	0
20180424T065000	2018	04	24	06:50	32.6	78.5	0
20180424T065500	2018	04	24	06:55	33.5	77.4	0
20180424T070000	2018	04	24	07:00	34.4	75.6	0
20180424T070500	2018	04	24	07:05	35.6	74.7	0
20180424T071000	2018	04	24	07:10	37.1	72.9	0
20180424T071500	2018	04	24	07:15	38	71.1	0
20180424T072000	2018	04	24	07:20	39	67.8	0
20180424T072500	2018	04	24	07:25	39	70.3	0
20180424T073000	2018	04	24	07:30	40	66.4	0
20180424T073500	2018	04	24	07:35	40.5	65.9	0
20180424T074000	2018	04	24	07:40	41	64	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180424T074500	2018	04	24	07:45	41.2	64.6	0
20180424T075000	2018	04	24	07:50	42.2	64.4	0
20180424T075500	2018	04	24	07:55	43.1	62.7	0
20180424T080000	2018	04	24	08:00	43.7	60.1	0
20180424T080500	2018	04	24	08:05	44.6	57.5	0
20180424T081000	2018	04	24	08:10	45.4	56	0
20180424T081500	2018	04	24	08:15	46.3	55	0
20180424T082000	2018	04	24	08:20	47.3	55.1	0
20180424T082500	2018	04	24	08:25	48.3	53.2	0
20180424T083000	2018	04	24	08:30	49	51.5	0
20180424T083500	2018	04	24	08:35	49.8	49.3	0
20180424T084000	2018	04	24	08:40	50.2	46.4	0
20180424T084500	2018	04	24	08:45	50.5	46.7	0
20180424T085000	2018	04	24	08:50	51.1	46.7	0
20180424T085500	2018	04	24	08:55	51.6	45.7	0
20180424T090000	2018	04	24	09:00	51.9	45.7	0
20180424T090500	2018	04	24	09:05	52.8	45.6	0
20180424T091000	2018	04	24	09:10	53.1	43.4	0
20180424T091500	2018	04	24	09:15	54	42.8	0
20180424T092000	2018	04	24	09:20	54.9	42.1	0
20180424T092500	2018	04	24	09:25	54.8	39.5	0
20180424T093000	2018	04	24	09:30	55.3	39.5	0
20180424T093500	2018	04	24	09:35	55.5	39.3	0
20180424T094000	2018	04	24	09:40	56	36.6	0
20180424T094500	2018	04	24	09:45	57	34.7	0
20180424T095000	2018	04	24	09:50	57.1	34.6	0
20180424T095500	2018	04	24	09:55	57.8	33.5	0
20180424T100000	2018	04	24	10:00	57.6	33.9	0
20180424T100500	2018	04	24	10:05	57.3	33.3	0
20180424T101000	2018	04	24	10:10	58	33.8	0
20180424T101500	2018	04	24	10:15	58.7	31.8	0
20180424T102000	2018	04	24	10:20	59.3	30.7	0
20180424T102500	2018	04	24	10:25	59.1	29.8	0
20180424T103000	2018	04	24	10:30	59.8	29.8	0
20180424T103500	2018	04	24	10:35	59.8	27.6	0
20180424T104000	2018	04	24	10:40	59.8	27.6	0
20180424T104500	2018	04	24	10:45	61.9	27.1	0
20180424T105000	2018	04	24	10:50	61.8	27.2	0
20180424T105500	2018	04	24	10:55	61.4	25.1	0
20180424T110000	2018	04	24	11:00	61.2	25.7	0
20180424T110500	2018	04	24	11:05	62.1	25.4	0
20180424T111000	2018	04	24	11:10	62.5	25.4	0
20180424T111500	2018	04	24	11:15	61.4	25.5	0
20180424T112000	2018	04	24	11:20	60.6	25.4	0
20180424T112500	2018	04	24	11:25	60.6	24.7	0
20180424T113000	2018	04	24	11:30	61.7	25.2	0
20180424T113500	2018	04	24	11:35	62.4	24.7	0
20180424T114000	2018	04	24	11:40	63.2	24.1	0
20180424T114500	2018	04	24	11:45	63.2	23.5	0
20180424T115000	2018	04	24	11:50	63.3	23.9	0
20180424T115500	2018	04	24	11:55	63.6	24.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180424T120000	2018	04	24	12:00	63.2	22.8	0
20180424T120500	2018	04	24	12:05	63.7	24.5	0
20180424T121000	2018	04	24	12:10	63.3	23.1	0
20180424T121500	2018	04	24	12:15	63.3	23.3	0
20180424T122000	2018	04	24	12:20	64.3	23.6	0
20180424T122500	2018	04	24	12:25	64.7	22.5	0
20180424T123000	2018	04	24	12:30	65.7	24.3	0
20180424T123500	2018	04	24	12:35	64.8	24.9	0
20180424T124000	2018	04	24	12:40	64.5	26	0
20180424T124500	2018	04	24	12:45	65	26.4	0
20180424T125000	2018	04	24	12:50	65	26.5	0
20180424T125500	2018	04	24	12:55	65.2	26.1	0
20180424T130000	2018	04	24	13:00	65.7	27.1	0
20180424T130500	2018	04	24	13:05	65.6	26	0
20180424T131000	2018	04	24	13:10	65.5	25.7	0
20180424T131500	2018	04	24	13:15	64.9	25.1	0
20180424T132000	2018	04	24	13:20	65.8	25.1	0
20180424T132500	2018	04	24	13:25	65.9	25.4	0
20180424T133000	2018	04	24	13:30	65.9	25.3	0
20180424T133500	2018	04	24	13:35	66.7	25.1	0
20180424T134000	2018	04	24	13:40	66.9	25	0
20180424T134500	2018	04	24	13:45	66.5	25	0
20180424T135000	2018	04	24	13:50	66.8	25.3	0
20180424T135500	2018	04	24	13:55	67.1	25.4	0
20180424T140000	2018	04	24	14:00	67.1	25.1	0
20180424T140500	2018	04	24	14:05	67.6	24.6	0
20180424T141000	2018	04	24	14:10	66.9	24.1	0
20180424T141500	2018	04	24	14:15	67.8	23.4	0
20180424T142000	2018	04	24	14:20	68.2	23.3	0
20180424T142500	2018	04	24	14:25	68.5	23.2	0
20180424T143000	2018	04	24	14:30	69.1	23.7	0
20180424T143500	2018	04	24	14:35	68.6	22.5	0
20180424T144000	2018	04	24	14:40	68.1	22.5	0
20180424T144500	2018	04	24	14:45	67.4	21.9	0
20180424T145000	2018	04	24	14:50	68.7	22.9	0
20180424T145500	2018	04	24	14:55	69	21.7	0
20180424T150000	2018	04	24	15:00	69.6	23.1	0
20180424T150500	2018	04	24	15:05	69.4	21.8	0
20180424T151000	2018	04	24	15:10	69.2	21.9	0
20180424T151500	2018	04	24	15:15	69.5	22.3	0
20180424T152000	2018	04	24	15:20	69.2	21.4	0
20180424T152500	2018	04	24	15:25	69	21.4	0
20180424T153000	2018	04	24	15:30	69.1	21.5	0
20180424T153500	2018	04	24	15:35	69.3	21.3	0
20180424T154000	2018	04	24	15:40	69.7	21.1	0
20180424T154500	2018	04	24	15:45	70	21.3	0
20180424T155000	2018	04	24	15:50	69.8	21.3	0
20180424T155500	2018	04	24	15:55	70.3	21.3	0
20180424T160000	2018	04	24	16:00	69.8	20.2	0
20180424T160500	2018	04	24	16:05	69.7	20.6	0
20180424T161000	2018	04	24	16:10	69.7	20.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180424T161500	2018	04	24	16:15	69.4	21.1	0
20180424T162000	2018	04	24	16:20	69.8	21.9	0
20180424T162500	2018	04	24	16:25	68.1	22.7	0
20180424T163000	2018	04	24	16:30	68.2	23.3	0
20180424T163500	2018	04	24	16:35	68	23.6	0
20180424T164000	2018	04	24	16:40	68.2	23.2	0
20180424T164500	2018	04	24	16:45	67.5	22.8	0
20180424T165000	2018	04	24	16:50	67.2	23.7	0
20180424T165500	2018	04	24	16:55	67.2	23.7	0
20180424T170000	2018	04	24	17:00	68.1	24	0
20180424T170500	2018	04	24	17:05	67.6	23.6	0
20180424T171000	2018	04	24	17:10	66.9	23.9	0
20180424T171500	2018	04	24	17:15	66.7	24.2	0
20180424T172000	2018	04	24	17:20	67	24.9	0
20180424T172500	2018	04	24	17:25	66.4	25	0
20180424T173000	2018	04	24	17:30	66.3	25	0
20180424T173500	2018	04	24	17:35	66.4	25.1	0
20180424T174000	2018	04	24	17:40	66.3	25.3	0
20180424T174500	2018	04	24	17:45	66.2	25	0
20180424T175000	2018	04	24	17:50	65.8	25.7	0
20180424T175500	2018	04	24	17:55	65.7	26.5	0
20180424T180000	2018	04	24	18:00	65.7	26.7	0
20180424T180500	2018	04	24	18:05	65.6	28	0
20180424T181000	2018	04	24	18:10	64.9	29.4	0
20180424T181500	2018	04	24	18:15	64.6	30.3	0
20180424T182000	2018	04	24	18:20	64.3	30.4	0
20180424T182500	2018	04	24	18:25	63.9	31.2	0
20180424T183000	2018	04	24	18:30	63.6	32	0
20180424T183500	2018	04	24	18:35	63.2	32.4	0
20180424T184000	2018	04	24	18:40	63	32.6	0
20180424T184500	2018	04	24	18:45	62.7	33.3	0
20180424T185000	2018	04	24	18:50	62.7	33.4	0
20180424T185500	2018	04	24	18:55	62.3	34.1	0
20180424T190000	2018	04	24	19:00	62.1	34.6	0
20180424T190500	2018	04	24	19:05	61.9	35.1	0
20180424T191000	2018	04	24	19:10	61.7	35.5	0
20180424T191500	2018	04	24	19:15	61.3	36.4	0
20180424T192000	2018	04	24	19:20	60.9	37.1	0
20180424T192500	2018	04	24	19:25	60.8	37.5	0
20180424T193000	2018	04	24	19:30	60.5	37.9	0
20180424T193500	2018	04	24	19:35	60.3	38.6	0
20180424T194000	2018	04	24	19:40	60.1	39.3	0
20180424T194500	2018	04	24	19:45	59.8	39.6	0
20180424T195000	2018	04	24	19:50	59.9	39.5	0
20180424T195500	2018	04	24	19:55	59.7	39.7	0
20180424T200000	2018	04	24	20:00	59.5	39.6	0
20180424T200500	2018	04	24	20:05	59.5	39.6	0
20180424T201000	2018	04	24	20:10	59.2	39.8	0
20180424T201500	2018	04	24	20:15	59.4	39.5	0
20180424T202000	2018	04	24	20:20	58.9	40.1	0
20180424T202500	2018	04	24	20:25	58.7	40.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180424T203000	2018	04	24	20:30	58.6	41	0
20180424T203500	2018	04	24	20:35	58.2	41.9	0
20180424T204000	2018	04	24	20:40	58.1	42.2	0
20180424T204500	2018	04	24	20:45	58	42.2	0
20180424T205000	2018	04	24	20:50	57.8	42.5	0
20180424T205500	2018	04	24	20:55	57.7	42.8	0
20180424T210000	2018	04	24	21:00	57.7	42.5	0
20180424T210500	2018	04	24	21:05	57.7	42.5	0
20180424T211000	2018	04	24	21:10	57.7	42.5	0
20180424T211500	2018	04	24	21:15	57.4	42.8	0
20180424T212000	2018	04	24	21:20	57.2	43.2	0
20180424T212500	2018	04	24	21:25	57.2	43.4	0
20180424T213000	2018	04	24	21:30	56.9	43.9	0
20180424T213500	2018	04	24	21:35	56.6	44.1	0
20180424T214000	2018	04	24	21:40	55.8	45.3	0
20180424T214500	2018	04	24	21:45	56.1	45.1	0
20180424T215000	2018	04	24	21:50	56.1	45	0
20180424T215500	2018	04	24	21:55	55.9	45.1	0
20180424T220000	2018	04	24	22:00	55.6	46.2	0
20180424T220500	2018	04	24	22:05	55.9	45.5	0
20180424T221000	2018	04	24	22:10	55.7	46	0
20180424T221500	2018	04	24	22:15	55.8	45.6	0
20180424T222000	2018	04	24	22:20	55.6	45.8	0
20180424T222500	2018	04	24	22:25	55.6	46.4	0
20180424T223000	2018	04	24	22:30	55.4	46.7	0
20180424T223500	2018	04	24	22:35	55.5	46.4	0
20180424T224000	2018	04	24	22:40	54.7	48	0
20180424T224500	2018	04	24	22:45	54.7	48.5	0
20180424T225000	2018	04	24	22:50	54.6	49.2	0
20180424T225500	2018	04	24	22:55	55.1	49.1	0
20180424T230000	2018	04	24	23:00	55.4	48.4	0
20180424T230500	2018	04	24	23:05	55.4	47.9	0
20180424T231000	2018	04	24	23:10	55.3	48.6	0
20180424T231500	2018	04	24	23:15	55.5	48.7	0
20180424T232000	2018	04	24	23:20	55.9	48.2	0
20180424T232500	2018	04	24	23:25	55.6	49.8	0
20180424T233000	2018	04	24	23:30	54.1	58	0.01
20180424T233500	2018	04	24	23:35	52.7	65.4	0
20180424T234000	2018	04	24	23:40	52	70.1	0
20180424T234500	2018	04	24	23:45	51.2	72.8	0
20180424T235000	2018	04	24	23:50	50.6	76.3	0
20180424T235500	2018	04	24	23:55	50.2	78.1	0.01
20180425T000000	2018	04	25	00:00	50	79.7	0.01
20180425T000500	2018	04	25	00:05	50.2	79.3	0
20180425T001000	2018	04	25	00:10	50.1	79.5	0.01
20180425T001500	2018	04	25	00:15	49.4	83.9	0
20180425T002000	2018	04	25	00:20	48.3	91	0
20180425T002500	2018	04	25	00:25	48	93.6	0
20180425T003000	2018	04	25	00:30	48.2	92.6	0
20180425T003500	2018	04	25	00:35	49	88.1	0
20180425T004000	2018	04	25	00:40	48.8	88.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180425T004500	2018	04	25	00:45	48.4	91.4	0
20180425T005000	2018	04	25	00:50	48.4	91.9	0
20180425T005500	2018	04	25	00:55	48.6	90.3	0
20180425T010000	2018	04	25	01:00	48.5	90.4	0
20180425T010500	2018	04	25	01:05	48.3	91.5	0
20180425T011000	2018	04	25	01:10	48.8	89.6	0
20180425T011500	2018	04	25	01:15	49.2	86.6	0
20180425T012000	2018	04	25	01:20	49.5	85	0
20180425T012500	2018	04	25	01:25	49.5	85.2	0
20180425T013000	2018	04	25	01:30	49.2	86.4	0
20180425T013500	2018	04	25	01:35	49.3	86.3	0
20180425T014000	2018	04	25	01:40	49	87.2	0
20180425T014500	2018	04	25	01:45	48.9	87.7	0
20180425T015000	2018	04	25	01:50	48.8	88.4	0
20180425T015500	2018	04	25	01:55	48.5	89.8	0
20180425T020000	2018	04	25	02:00	48.3	91.6	0
20180425T020500	2018	04	25	02:05	48.1	92.7	0
20180425T021000	2018	04	25	02:10	48	93.1	0.01
20180425T021500	2018	04	25	02:15	48	93.7	0.01
20180425T022000	2018	04	25	02:20	47.9	94.1	0.01
20180425T022500	2018	04	25	02:25	47.8	94.4	0
20180425T023000	2018	04	25	02:30	47.8	94.5	0.01
20180425T023500	2018	04	25	02:35	47.6	95.3	0.01
20180425T024000	2018	04	25	02:40	47.5	96.1	0.01
20180425T024500	2018	04	25	02:45	47.4	96.3	0.01
20180425T025000	2018	04	25	02:50	47.3	96.7	0
20180425T025500	2018	04	25	02:55	47.3	97	0
20180425T030000	2018	04	25	03:00	47.2	97.2	0.01
20180425T030500	2018	04	25	03:05	47.1	97.5	0.01
20180425T031000	2018	04	25	03:10	47	97.7	0.01
20180425T031500	2018	04	25	03:15	47	97.9	0.01
20180425T032000	2018	04	25	03:20	46.9	98	0
20180425T032500	2018	04	25	03:25	46.9	97.8	0.01
20180425T033000	2018	04	25	03:30	46.9	97.5	0.01
20180425T033500	2018	04	25	03:35	46.9	97.3	0.01
20180425T034000	2018	04	25	03:40	46.8	97.2	0
20180425T034500	2018	04	25	03:45	46.8	97.2	0
20180425T035000	2018	04	25	03:50	46.7	97.3	0
20180425T035500	2018	04	25	03:55	46.6	97.2	0
20180425T040000	2018	04	25	04:00	46.5	97	0
20180425T040500	2018	04	25	04:05	46.4	96.7	0.01
20180425T041000	2018	04	25	04:10	46.4	96.5	0
20180425T041500	2018	04	25	04:15	46.3	96.7	0
20180425T042000	2018	04	25	04:20	46.3	97	0
20180425T042500	2018	04	25	04:25	46.2	97.3	0
20180425T043000	2018	04	25	04:30	46.2	97.7	0
20180425T043500	2018	04	25	04:35	46.1	97.8	0
20180425T044000	2018	04	25	04:40	46	97.7	0
20180425T044500	2018	04	25	04:45	45.9	97.2	0
20180425T045000	2018	04	25	04:50	45.8	96.9	0
20180425T045500	2018	04	25	04:55	45.7	96.6	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180425T050000	2018	04	25	05:00	45.7	96.7	0
20180425T050500	2018	04	25	05:05	45.7	96.9	0
20180425T051000	2018	04	25	05:10	45.7	97.1	0
20180425T051500	2018	04	25	05:15	45.7	97.2	0
20180425T052000	2018	04	25	05:20	45.6	97.2	0
20180425T052500	2018	04	25	05:25	45.6	97.5	0
20180425T053000	2018	04	25	05:30	45.6	97.8	0
20180425T053500	2018	04	25	05:35	45.6	97.7	0
20180425T054000	2018	04	25	05:40	45.5	97.5	0
20180425T054500	2018	04	25	05:45	45.6	97.2	0
20180425T055000	2018	04	25	05:50	45.7	96.6	0
20180425T055500	2018	04	25	05:55	45.8	96.4	0
20180425T060000	2018	04	25	06:00	45.8	96.4	0
20180425T060500	2018	04	25	06:05	45.7	96.5	0
20180425T061000	2018	04	25	06:10	45.8	96.6	0
20180425T061500	2018	04	25	06:15	45.8	96.6	0
20180425T062000	2018	04	25	06:20	45.7	97	0
20180425T062500	2018	04	25	06:25	45.6	97.6	0.01
20180425T063000	2018	04	25	06:30	45.6	98	0.02
20180425T063500	2018	04	25	06:35	45.5	98.4	0.02
20180425T064000	2018	04	25	06:40	45.6	98.7	0.01
20180425T064500	2018	04	25	06:45	45.6	98.8	0
20180425T065000	2018	04	25	06:50	45.7	99.9	0
20180425T065500	2018	04	25	06:55	45.8	100	0.01
20180425T070000	2018	04	25	07:00	45.9	100	0.01
20180425T070500	2018	04	25	07:05	46	100	0.02
20180425T071000	2018	04	25	07:10	46	100	0.01
20180425T071500	2018	04	25	07:15	46.2	100	0
20180425T072000	2018	04	25	07:20	46.3	100	0
20180425T072500	2018	04	25	07:25	46.4	100	0
20180425T073000	2018	04	25	07:30	46.4	99.9	0
20180425T073500	2018	04	25	07:35	46.5	99	0
20180425T074000	2018	04	25	07:40	46.6	98.1	0
20180425T074500	2018	04	25	07:45	46.7	97.9	0
20180425T075000	2018	04	25	07:50	46.8	97.8	0
20180425T075500	2018	04	25	07:55	47	97.7	0
20180425T080000	2018	04	25	08:00	47.3	97.4	0
20180425T080500	2018	04	25	08:05	47.6	96.2	0
20180425T081000	2018	04	25	08:10	47.5	96	0
20180425T081500	2018	04	25	08:15	47.4	96.7	0
20180425T082000	2018	04	25	08:20	47.4	96.9	0
20180425T082500	2018	04	25	08:25	47.5	96.8	0
20180425T083000	2018	04	25	08:30	47.5	97.1	0
20180425T083500	2018	04	25	08:35	47.5	97.2	0
20180425T084000	2018	04	25	08:40	47.7	97.2	0
20180425T084500	2018	04	25	08:45	47.8	97	0
20180425T085000	2018	04	25	08:50	47.8	96.8	0
20180425T085500	2018	04	25	08:55	47.8	97	0
20180425T090000	2018	04	25	09:00	47.9	97.1	0
20180425T090500	2018	04	25	09:05	48	97.1	0
20180425T091000	2018	04	25	09:10	48.2	97.3	0.01

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180425T091500	2018	04	25	09:15	48.2	97.4	0
20180425T092000	2018	04	25	09:20	48.3	97.8	0.01
20180425T092500	2018	04	25	09:25	48.3	97.9	0.01
20180425T093000	2018	04	25	09:30	48.4	97.9	0.01
20180425T093500	2018	04	25	09:35	48.4	97.9	0.01
20180425T094000	2018	04	25	09:40	48.4	98	0.02
20180425T094500	2018	04	25	09:45	48.4	97.8	0.01
20180425T095000	2018	04	25	09:50	48.5	97.9	0.01
20180425T095500	2018	04	25	09:55	48.6	97.9	0
20180425T100000	2018	04	25	10:00	48.7	97.7	0.01
20180425T100500	2018	04	25	10:05	48.8	97.5	0
20180425T101000	2018	04	25	10:10	49	97.6	0
20180425T101500	2018	04	25	10:15	49.1	97.7	0
20180425T102000	2018	04	25	10:20	49.1	97.5	0
20180425T102500	2018	04	25	10:25	49.1	97.2	0
20180425T103000	2018	04	25	10:30	49.1	96.8	0
20180425T103500	2018	04	25	10:35	49.1	97.2	0
20180425T104000	2018	04	25	10:40	49.1	97	0
20180425T104500	2018	04	25	10:45	49.2	97	0
20180425T105000	2018	04	25	10:50	49.3	97.1	0
20180425T105500	2018	04	25	10:55	49.3	97.5	0
20180425T110000	2018	04	25	11:00	49.4	97.3	0
20180425T110500	2018	04	25	11:05	49.6	97.4	0
20180425T111000	2018	04	25	11:10	49.7	97.3	0
20180425T111500	2018	04	25	11:15	49.8	97.2	0
20180425T112000	2018	04	25	11:20	49.8	97.2	0
20180425T112500	2018	04	25	11:25	49.8	97.1	0
20180425T113000	2018	04	25	11:30	49.9	97.3	0
20180425T113500	2018	04	25	11:35	49.9	97.2	0
20180425T114000	2018	04	25	11:40	50.1	97.2	0
20180425T114500	2018	04	25	11:45	50.1	97	0
20180425T115000	2018	04	25	11:50	50.1	96.8	0
20180425T115500	2018	04	25	11:55	50.1	96.7	0
20180425T120000	2018	04	25	12:00	50.1	97.1	0
20180425T120500	2018	04	25	12:05	50.1	97.1	0.01
20180425T121000	2018	04	25	12:10	50.2	97.4	0
20180425T121500	2018	04	25	12:15	50.2	97.4	0
20180425T122000	2018	04	25	12:20	50.2	97.4	0
20180425T122500	2018	04	25	12:25	50.2	97.2	0
20180425T123000	2018	04	25	12:30	50.3	97.3	0
20180425T123500	2018	04	25	12:35	50.2	97.2	0
20180425T124000	2018	04	25	12:40	50.4	97.5	0
20180425T124500	2018	04	25	12:45	50.5	97.7	0
20180425T125000	2018	04	25	12:50	50.7	97.8	0
20180425T125500	2018	04	25	12:55	50.8	97.7	0
20180425T130000	2018	04	25	13:00	50.8	97.5	0
20180425T130500	2018	04	25	13:05	50.9	97.2	0
20180425T131000	2018	04	25	13:10	51.1	97.4	0
20180425T131500	2018	04	25	13:15	51	97	0
20180425T132000	2018	04	25	13:20	51.2	96.9	0
20180425T132500	2018	04	25	13:25	51.2	96.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180425T133000	2018	04	25	13:30	51.3	97.1	0
20180425T133500	2018	04	25	13:35	51.4	97.4	0
20180425T134000	2018	04	25	13:40	51.6	97.6	0
20180425T134500	2018	04	25	13:45	51.8	97.4	0
20180425T135000	2018	04	25	13:50	52.1	96.8	0
20180425T135500	2018	04	25	13:55	52.3	95.6	0
20180425T140000	2018	04	25	14:00	52.4	95.1	0
20180425T140500	2018	04	25	14:05	52.4	94.3	0
20180425T141000	2018	04	25	14:10	52.6	94.1	0
20180425T141500	2018	04	25	14:15	52.9	94.2	0
20180425T142000	2018	04	25	14:20	53.3	94	0
20180425T142500	2018	04	25	14:25	53.5	93.3	0
20180425T143000	2018	04	25	14:30	53.5	92.6	0
20180425T143500	2018	04	25	14:35	53.6	92.9	0
20180425T144000	2018	04	25	14:40	53.7	93.3	0
20180425T144500	2018	04	25	14:45	53.5	93	0
20180425T145000	2018	04	25	14:50	53.2	93.5	0
20180425T145500	2018	04	25	14:55	53	94.2	0
20180425T150000	2018	04	25	15:00	52.9	94.2	0.01
20180425T150500	2018	04	25	15:05	52.9	95.3	0
20180425T151000	2018	04	25	15:10	52.9	96.4	0.01
20180425T151500	2018	04	25	15:15	53.3	97.2	0.01
20180425T152000	2018	04	25	15:20	53	97	0
20180425T152500	2018	04	25	15:25	52.4	97.6	0
20180425T153000	2018	04	25	15:30	52.1	98	0
20180425T153500	2018	04	25	15:35	52.1	99.9	0
20180425T154000	2018	04	25	15:40	52.2	100	0
20180425T154500	2018	04	25	15:45	52.5	100	0
20180425T155000	2018	04	25	15:50	52.4	100	0
20180425T155500	2018	04	25	15:55	52.7	100	0
20180425T160000	2018	04	25	16:00	52.6	100	0
20180425T160500	2018	04	25	16:05	52.6	100	0
20180425T161000	2018	04	25	16:10	52.6	100	0
20180425T161500	2018	04	25	16:15	52.6	100	0
20180425T162000	2018	04	25	16:20	52.4	100	0
20180425T162500	2018	04	25	16:25	52.4	100	0
20180425T163000	2018	04	25	16:30	52.2	100	0
20180425T163500	2018	04	25	16:35	52.1	100	0
20180425T164000	2018	04	25	16:40	52	100	0
20180425T164500	2018	04	25	16:45	51.9	100	0
20180425T165000	2018	04	25	16:50	51.9	100	0
20180425T165500	2018	04	25	16:55	51.8	100	0
20180425T170000	2018	04	25	17:00	51.8	100	0
20180425T170500	2018	04	25	17:05	51.6	100	0
20180425T171000	2018	04	25	17:10	51.6	100	0
20180425T171500	2018	04	25	17:15	51.6	100	0
20180425T172000	2018	04	25	17:20	51.5	100	0.01
20180425T172500	2018	04	25	17:25	51.4	100	0.01
20180425T173000	2018	04	25	17:30	51.4	100	0.02
20180425T173500	2018	04	25	17:35	51.3	100	0.01
20180425T174000	2018	04	25	17:40	51.3	100	0.01

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180425T174500	2018	04	25	17:45	51.3	100	0.01
20180425T175000	2018	04	25	17:50	51.3	100	0
20180425T175500	2018	04	25	17:55	51.4	100	0
20180425T180000	2018	04	25	18:00	51.5	100	0
20180425T180500	2018	04	25	18:05	51.5	100	0.01
20180425T181000	2018	04	25	18:10	51.5	100	0.01
20180425T181500	2018	04	25	18:15	51.6	100	0
20180425T182000	2018	04	25	18:20	51.6	100	0
20180425T182500	2018	04	25	18:25	51.6	100	0
20180425T183000	2018	04	25	18:30	51.6	100	0
20180425T183500	2018	04	25	18:35	51.6	100	0
20180425T184000	2018	04	25	18:40	51.6	100	0
20180425T184500	2018	04	25	18:45	51.7	100	0.03
20180425T185000	2018	04	25	18:50	51.7	100	0.01
20180425T185500	2018	04	25	18:55	51.7	100	0.01
20180425T190000	2018	04	25	19:00	51.8	100	0.03
20180425T190500	2018	04	25	19:05	51.8	100	0.03
20180425T191000	2018	04	25	19:10	51.9	100	0.01
20180425T191500	2018	04	25	19:15	51.9	100	0.01
20180425T192000	2018	04	25	19:20	52	100	0.05
20180425T192500	2018	04	25	19:25	52.1	100	0.03
20180425T193000	2018	04	25	19:30	52.1	100	0.03
20180425T193500	2018	04	25	19:35	52.1	100	0.03
20180425T194000	2018	04	25	19:40	52.1	100	0.02
20180425T194500	2018	04	25	19:45	52.2	100	0.01
20180425T195000	2018	04	25	19:50	52.3	100	0
20180425T195500	2018	04	25	19:55	52.3	100	0
20180425T200000	2018	04	25	20:00	52.3	100	0
20180425T200500	2018	04	25	20:05	52.3	100	0
20180425T201000	2018	04	25	20:10	52.3	100	0
20180425T201500	2018	04	25	20:15	52.3	100	0
20180425T202000	2018	04	25	20:20	52.3	100	0
20180425T202500	2018	04	25	20:25	52.3	100	0
20180425T203000	2018	04	25	20:30	52.3	100	0
20180425T203500	2018	04	25	20:35	52.2	100	0
20180425T204000	2018	04	25	20:40	52.1	100	0
20180425T204500	2018	04	25	20:45	52.1	100	0
20180425T205000	2018	04	25	20:50	52.1	100	0
20180425T205500	2018	04	25	20:55	52.1	100	0
20180425T210000	2018	04	25	21:00	52	100	0
20180425T210500	2018	04	25	21:05	52	100	0
20180425T211000	2018	04	25	21:10	51.9	100	0
20180425T211500	2018	04	25	21:15	51.9	100	0
20180425T212000	2018	04	25	21:20	51.8	100	0
20180425T212500	2018	04	25	21:25	51.7	100	0
20180425T213000	2018	04	25	21:30	51.7	100	0
20180425T213500	2018	04	25	21:35	51.6	100	0
20180425T214000	2018	04	25	21:40	51.6	100	0
20180425T214500	2018	04	25	21:45	51.5	100	0
20180425T215000	2018	04	25	21:50	51.5	100	0
20180425T215500	2018	04	25	21:55	51.5	100	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180425T220000	2018	04	25	22:00	51.5	100	0
20180425T220500	2018	04	25	22:05	51.4	100	0
20180425T221000	2018	04	25	22:10	51.4	100	0
20180425T221500	2018	04	25	22:15	51.2	100	0
20180425T222000	2018	04	25	22:20	51.2	100	0
20180425T222500	2018	04	25	22:25	51.4	100	0
20180425T223000	2018	04	25	22:30	51.4	100	0
20180425T223500	2018	04	25	22:35	51.5	100	0
20180425T224000	2018	04	25	22:40	51.5	100	0
20180425T224500	2018	04	25	22:45	51.5	100	0
20180425T225000	2018	04	25	22:50	51.5	100	0
20180425T225500	2018	04	25	22:55	51.5	100	0
20180425T230000	2018	04	25	23:00	51.5	100	0
20180425T230500	2018	04	25	23:05	51.5	100	0
20180425T231000	2018	04	25	23:10	51.4	100	0
20180425T231500	2018	04	25	23:15	51.4	100	0
20180425T232000	2018	04	25	23:20	51.4	100	0
20180425T232500	2018	04	25	23:25	51.3	100	0
20180425T233000	2018	04	25	23:30	51.3	100	0
20180425T233500	2018	04	25	23:35	51.2	100	0
20180425T234000	2018	04	25	23:40	51.1	100	0
20180425T234500	2018	04	25	23:45	51.1	100	0
20180425T235000	2018	04	25	23:50	51.2	100	0
20180425T235500	2018	04	25	23:55	51.2	100	0
20180426T000000	2018	04	26	00:00	51.1	100	0
20180426T000500	2018	04	26	00:05	51.2	100	0
20180426T001000	2018	04	26	00:10	51.1	100	0
20180426T001500	2018	04	26	00:15	51.1	100	0
20180426T002000	2018	04	26	00:20	51.1	100	0
20180426T002500	2018	04	26	00:25	51.2	100	0
20180426T003000	2018	04	26	00:30	51.1	100	0
20180426T003500	2018	04	26	00:35	51.1	100	0
20180426T004000	2018	04	26	00:40	51.1	100	0
20180426T004500	2018	04	26	00:45	51.1	100	0
20180426T005000	2018	04	26	00:50	51.2	100	0
20180426T005500	2018	04	26	00:55	51.2	100	0
20180426T010000	2018	04	26	01:00	51.1	100	0
20180426T010500	2018	04	26	01:05	51.1	100	0
20180426T011000	2018	04	26	01:10	51	100	0
20180426T011500	2018	04	26	01:15	51.1	100	0
20180426T012000	2018	04	26	01:20	51.2	100	0
20180426T012500	2018	04	26	01:25	51.2	100	0
20180426T013000	2018	04	26	01:30	51.2	100	0
20180426T013500	2018	04	26	01:35	51.1	100	0
20180426T014000	2018	04	26	01:40	51.1	100	0
20180426T014500	2018	04	26	01:45	51.1	100	0
20180426T015000	2018	04	26	01:50	51.2	100	0
20180426T015500	2018	04	26	01:55	51.2	100	0
20180426T020000	2018	04	26	02:00	51.3	100	0
20180426T020500	2018	04	26	02:05	51.3	100	0
20180426T021000	2018	04	26	02:10	51.2	100	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180426T021500	2018	04	26	02:15	51	100	0
20180426T022000	2018	04	26	02:20	50.9	100	0
20180426T022500	2018	04	26	02:25	50.7	100	0
20180426T023000	2018	04	26	02:30	50.5	100	0
20180426T023500	2018	04	26	02:35	50.4	98.6	0
20180426T024000	2018	04	26	02:40	50.1	95.1	0
20180426T024500	2018	04	26	02:45	49.8	93	0
20180426T025000	2018	04	26	02:50	49.6	92.6	0
20180426T025500	2018	04	26	02:55	49.5	92.2	0
20180426T030000	2018	04	26	03:00	49.4	93	0
20180426T030500	2018	04	26	03:05	49.3	93	0
20180426T031000	2018	04	26	03:10	49.2	93.1	0
20180426T031500	2018	04	26	03:15	49.2	92.9	0
20180426T032000	2018	04	26	03:20	49.1	92.9	0
20180426T032500	2018	04	26	03:25	49	93.1	0
20180426T033000	2018	04	26	03:30	49	93.2	0
20180426T033500	2018	04	26	03:35	49	93.2	0
20180426T034000	2018	04	26	03:40	48.9	93	0
20180426T034500	2018	04	26	03:45	48.8	92.6	0
20180426T035000	2018	04	26	03:50	48.8	91.9	0
20180426T035500	2018	04	26	03:55	48.7	92	0
20180426T040000	2018	04	26	04:00	48.7	91.7	0
20180426T040500	2018	04	26	04:05	48.6	92.1	0
20180426T041000	2018	04	26	04:10	48.6	92.1	0
20180426T041500	2018	04	26	04:15	48.6	92	0
20180426T042000	2018	04	26	04:20	48.5	92.4	0
20180426T042500	2018	04	26	04:25	48.5	92	0
20180426T043000	2018	04	26	04:30	48.6	91.4	0
20180426T043500	2018	04	26	04:35	48.7	91.4	0
20180426T044000	2018	04	26	04:40	48.9	91.5	0
20180426T044500	2018	04	26	04:45	48.9	91.5	0
20180426T045000	2018	04	26	04:50	48.9	91.7	0
20180426T045500	2018	04	26	04:55	48.8	91.8	0
20180426T050000	2018	04	26	05:00	48.8	91.8	0
20180426T050500	2018	04	26	05:05	48.7	91.8	0
20180426T051000	2018	04	26	05:10	48.6	91.7	0
20180426T051500	2018	04	26	05:15	48.6	91.3	0
20180426T052000	2018	04	26	05:20	48.5	90.9	0
20180426T052500	2018	04	26	05:25	48.5	90.6	0
20180426T053000	2018	04	26	05:30	48.4	90.7	0
20180426T053500	2018	04	26	05:35	48.3	90.7	0
20180426T054000	2018	04	26	05:40	48.3	90.7	0
20180426T054500	2018	04	26	05:45	48.2	90.7	0
20180426T055000	2018	04	26	05:50	48.1	90.9	0
20180426T055500	2018	04	26	05:55	48	89.8	0
20180426T060000	2018	04	26	06:00	47.9	89	0
20180426T060500	2018	04	26	06:05	47.5	90	0
20180426T061000	2018	04	26	06:10	47.1	90.8	0
20180426T061500	2018	04	26	06:15	46.8	91.4	0
20180426T062000	2018	04	26	06:20	46.7	91	0
20180426T062500	2018	04	26	06:25	46.4	91.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180426T063000	2018	04	26	06:30	46.2	91.2	0
20180426T063500	2018	04	26	06:35	46	92.1	0
20180426T064000	2018	04	26	06:40	45.8	92.2	0
20180426T064500	2018	04	26	06:45	45.7	92.4	0
20180426T065000	2018	04	26	06:50	45.7	92.4	0
20180426T065500	2018	04	26	06:55	45.7	91.5	0
20180426T070000	2018	04	26	07:00	45.7	91.9	0
20180426T070500	2018	04	26	07:05	45.7	92.7	0
20180426T071000	2018	04	26	07:10	45.6	92.4	0
20180426T071500	2018	04	26	07:15	45.4	94.3	0
20180426T072000	2018	04	26	07:20	45.2	93.2	0
20180426T072500	2018	04	26	07:25	45.3	90.8	0
20180426T073000	2018	04	26	07:30	45.4	89.7	0
20180426T073500	2018	04	26	07:35	45.4	89.3	0
20180426T074000	2018	04	26	07:40	45.4	87	0
20180426T074500	2018	04	26	07:45	45.4	87.7	0
20180426T075000	2018	04	26	07:50	45.2	90.4	0
20180426T075500	2018	04	26	07:55	45.2	91.7	0
20180426T080000	2018	04	26	08:00	45.1	91.5	0
20180426T080500	2018	04	26	08:05	45	91.5	0
20180426T081000	2018	04	26	08:10	45.1	90.7	0
20180426T081500	2018	04	26	08:15	45.5	90.3	0
20180426T082000	2018	04	26	08:20	45.6	89.8	0
20180426T082500	2018	04	26	08:25	45.5	89.5	0
20180426T083000	2018	04	26	08:30	45.5	88.2	0
20180426T083500	2018	04	26	08:35	45.4	88.2	0
20180426T084000	2018	04	26	08:40	45.4	88.7	0
20180426T084500	2018	04	26	08:45	45.9	88.1	0
20180426T085000	2018	04	26	08:50	47.1	86.2	0
20180426T085500	2018	04	26	08:55	46.9	83.8	0
20180426T090000	2018	04	26	09:00	47	82.3	0
20180426T090500	2018	04	26	09:05	46.7	82.6	0
20180426T091000	2018	04	26	09:10	46.2	83.3	0
20180426T091500	2018	04	26	09:15	45.7	84.4	0
20180426T092000	2018	04	26	09:20	45.4	85.3	0
20180426T092500	2018	04	26	09:25	45.4	85.6	0
20180426T093000	2018	04	26	09:30	45.1	85.4	0
20180426T093500	2018	04	26	09:35	46	85.8	0
20180426T094000	2018	04	26	09:40	46.9	83.6	0
20180426T094500	2018	04	26	09:45	47.3	79.3	0
20180426T095000	2018	04	26	09:50	47.5	79.3	0
20180426T095500	2018	04	26	09:55	47.1	79.9	0
20180426T100000	2018	04	26	10:00	46.5	80.8	0
20180426T100500	2018	04	26	10:05	46.2	81.2	0
20180426T101000	2018	04	26	10:10	45.9	81.7	0
20180426T101500	2018	04	26	10:15	46.1	81.5	0
20180426T102000	2018	04	26	10:20	46	80.4	0
20180426T102500	2018	04	26	10:25	46.6	81.9	0
20180426T103000	2018	04	26	10:30	46.7	81.3	0
20180426T103500	2018	04	26	10:35	46.2	79.8	0
20180426T104000	2018	04	26	10:40	45.9	80.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180426T104500	2018	04	26	10:45	45.8	79.8	0
20180426T105000	2018	04	26	10:50	45.8	79.6	0
20180426T105500	2018	04	26	10:55	45.4	80.6	0
20180426T110000	2018	04	26	11:00	45.1	81.5	0
20180426T110500	2018	04	26	11:05	44.9	81.5	0
20180426T111000	2018	04	26	11:10	45.4	80.6	0
20180426T111500	2018	04	26	11:15	45.8	79.5	0
20180426T112000	2018	04	26	11:20	45.7	80.5	0
20180426T112500	2018	04	26	11:25	45.4	80.4	0
20180426T113000	2018	04	26	11:30	44.8	80.9	0
20180426T113500	2018	04	26	11:35	44.2	82.6	0
20180426T114000	2018	04	26	11:40	43.9	84.5	0
20180426T114500	2018	04	26	11:45	43.5	85.8	0
20180426T115000	2018	04	26	11:50	43.8	87.4	0
20180426T115500	2018	04	26	11:55	44.1	85.6	0
20180426T120000	2018	04	26	12:00	43.9	83.9	0
20180426T120500	2018	04	26	12:05	44	83.4	0
20180426T121000	2018	04	26	12:10	44.1	83.8	0
20180426T121500	2018	04	26	12:15	44.4	83.7	0
20180426T122000	2018	04	26	12:20	44.8	82.4	0
20180426T122500	2018	04	26	12:25	45.2	82.6	0
20180426T123000	2018	04	26	12:30	45.2	81.3	0
20180426T123500	2018	04	26	12:35	45.1	80	0
20180426T124000	2018	04	26	12:40	45.7	80.5	0
20180426T124500	2018	04	26	12:45	46	79.4	0
20180426T125000	2018	04	26	12:50	46.1	78.9	0
20180426T125500	2018	04	26	12:55	46	79.8	0
20180426T130000	2018	04	26	13:00	45.5	79.7	0
20180426T130500	2018	04	26	13:05	45.3	80.6	0
20180426T131000	2018	04	26	13:10	45.3	81.2	0
20180426T131500	2018	04	26	13:15	45.2	80.8	0
20180426T132000	2018	04	26	13:20	45	81.5	0
20180426T132500	2018	04	26	13:25	44.8	82	0
20180426T133000	2018	04	26	13:30	44.8	82.6	0
20180426T133500	2018	04	26	13:35	44.6	82.8	0
20180426T134000	2018	04	26	13:40	45.1	83.5	0
20180426T134500	2018	04	26	13:45	45.4	82.9	0
20180426T135000	2018	04	26	13:50	46.4	81.8	0
20180426T135500	2018	04	26	13:55	46.6	80.6	0
20180426T140000	2018	04	26	14:00	46.8	79.3	0
20180426T140500	2018	04	26	14:05	47.9	79	0
20180426T141000	2018	04	26	14:10	48	76.7	0
20180426T141500	2018	04	26	14:15	47.4	77.8	0
20180426T142000	2018	04	26	14:20	47.9	77.5	0
20180426T142500	2018	04	26	14:25	47.3	78.2	0
20180426T143000	2018	04	26	14:30	46.8	78.8	0
20180426T143500	2018	04	26	14:35	46.5	79.5	0
20180426T144000	2018	04	26	14:40	46.4	78.9	0
20180426T144500	2018	04	26	14:45	46.9	79.3	0
20180426T145000	2018	04	26	14:50	47.2	78.4	0
20180426T145500	2018	04	26	14:55	47	78.2	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180426T150000	2018	04	26	15:00	46.5	79.3	0
20180426T150500	2018	04	26	15:05	46.2	79.6	0
20180426T151000	2018	04	26	15:10	46.2	80.1	0
20180426T151500	2018	04	26	15:15	46.1	79.4	0
20180426T152000	2018	04	26	15:20	46.3	78.3	0
20180426T152500	2018	04	26	15:25	46.9	77.8	0
20180426T153000	2018	04	26	15:30	47	76.5	0
20180426T153500	2018	04	26	15:35	47	75.5	0
20180426T154000	2018	04	26	15:40	46.9	75.6	0
20180426T154500	2018	04	26	15:45	46.7	75.9	0
20180426T155000	2018	04	26	15:50	46.5	76.9	0
20180426T155500	2018	04	26	15:55	46.2	78.2	0
20180426T160000	2018	04	26	16:00	45.9	80.3	0
20180426T160500	2018	04	26	16:05	45.8	81.1	0
20180426T161000	2018	04	26	16:10	45.7	81.7	0
20180426T161500	2018	04	26	16:15	45.6	82.5	0
20180426T162000	2018	04	26	16:20	45.8	83.5	0
20180426T162500	2018	04	26	16:25	46.1	82.4	0
20180426T163000	2018	04	26	16:30	46.3	81.6	0
20180426T163500	2018	04	26	16:35	46.3	81	0
20180426T164000	2018	04	26	16:40	46.6	80.5	0
20180426T164500	2018	04	26	16:45	46.6	80.3	0
20180426T165000	2018	04	26	16:50	46.8	79.6	0
20180426T165500	2018	04	26	16:55	46.6	79	0
20180426T170000	2018	04	26	17:00	46.5	78.4	0
20180426T170500	2018	04	26	17:05	46.4	78.3	0
20180426T171000	2018	04	26	17:10	46.4	78.7	0
20180426T171500	2018	04	26	17:15	46.4	79.3	0
20180426T172000	2018	04	26	17:20	46.3	79.4	0
20180426T172500	2018	04	26	17:25	46.3	79.6	0
20180426T173000	2018	04	26	17:30	46.6	79	0
20180426T173500	2018	04	26	17:35	45.9	79.1	0
20180426T174000	2018	04	26	17:40	45.7	80.7	0
20180426T174500	2018	04	26	17:45	45.7	81	0
20180426T175000	2018	04	26	17:50	45.5	81.5	0
20180426T175500	2018	04	26	17:55	45.6	81.8	0
20180426T180000	2018	04	26	18:00	45.5	81.7	0
20180426T180500	2018	04	26	18:05	45.5	81.5	0
20180426T181000	2018	04	26	18:10	45.5	81.2	0
20180426T181500	2018	04	26	18:15	45.6	80.9	0
20180426T182000	2018	04	26	18:20	45.4	80.8	0
20180426T182500	2018	04	26	18:25	45.2	83	0
20180426T183000	2018	04	26	18:30	44.9	84.5	0
20180426T183500	2018	04	26	18:35	44.6	85.9	0
20180426T184000	2018	04	26	18:40	44.6	85.9	0
20180426T184500	2018	04	26	18:45	44.5	86.2	0
20180426T185000	2018	04	26	18:50	44.4	86.5	0
20180426T185500	2018	04	26	18:55	44.4	86.7	0
20180426T190000	2018	04	26	19:00	44.3	86.8	0
20180426T190500	2018	04	26	19:05	44.2	86.9	0
20180426T191000	2018	04	26	19:10	44.3	86.9	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180426T191500	2018	04	26	19:15	44.3	86.6	0
20180426T192000	2018	04	26	19:20	44.5	86.1	0
20180426T192500	2018	04	26	19:25	44.6	85.5	0
20180426T193000	2018	04	26	19:30	44.7	85.2	0
20180426T193500	2018	04	26	19:35	44.7	84.6	0
20180426T194000	2018	04	26	19:40	44.5	84.7	0
20180426T194500	2018	04	26	19:45	44.4	84.8	0
20180426T195000	2018	04	26	19:50	44.2	84.6	0
20180426T195500	2018	04	26	19:55	44.3	84.1	0
20180426T200000	2018	04	26	20:00	44.1	83.9	0
20180426T200500	2018	04	26	20:05	44	84.1	0
20180426T201000	2018	04	26	20:10	43.8	84.7	0
20180426T201500	2018	04	26	20:15	43.8	84.6	0
20180426T202000	2018	04	26	20:20	43.7	84.7	0
20180426T202500	2018	04	26	20:25	43.6	84.8	0
20180426T203000	2018	04	26	20:30	43.6	84.7	0
20180426T203500	2018	04	26	20:35	43.6	84.5	0
20180426T204000	2018	04	26	20:40	43.1	85.3	0
20180426T204500	2018	04	26	20:45	42.6	86.5	0
20180426T205000	2018	04	26	20:50	42	87.8	0
20180426T205500	2018	04	26	20:55	41.7	88.5	0
20180426T210000	2018	04	26	21:00	41.3	89.1	0
20180426T210500	2018	04	26	21:05	41.3	89.6	0
20180426T211000	2018	04	26	21:10	41.8	89.5	0
20180426T211500	2018	04	26	21:15	41.6	89.1	0
20180426T212000	2018	04	26	21:20	41.4	89.2	0
20180426T212500	2018	04	26	21:25	41.5	89.7	0
20180426T213000	2018	04	26	21:30	41.6	89.4	0
20180426T213500	2018	04	26	21:35	41.6	89.4	0
20180426T214000	2018	04	26	21:40	41.5	89.2	0
20180426T214500	2018	04	26	21:45	41.2	89.2	0
20180426T215000	2018	04	26	21:50	40.8	89.5	0
20180426T215500	2018	04	26	21:55	40.6	90.2	0
20180426T220000	2018	04	26	22:00	39.7	90.9	0
20180426T220500	2018	04	26	22:05	39.6	92.6	0
20180426T221000	2018	04	26	22:10	39.6	93.6	0
20180426T221500	2018	04	26	22:15	40.1	93.1	0
20180426T222000	2018	04	26	22:20	40.3	93.1	0
20180426T222500	2018	04	26	22:25	41.1	92	0
20180426T223000	2018	04	26	22:30	39.3	89.6	0
20180426T223500	2018	04	26	22:35	39.5	94.5	0
20180426T224000	2018	04	26	22:40	40.4	94.1	0
20180426T224500	2018	04	26	22:45	40.2	91.9	0
20180426T225000	2018	04	26	22:50	39.1	92.4	0
20180426T225500	2018	04	26	22:55	39.5	93	0
20180426T230000	2018	04	26	23:00	38.4	91.2	0
20180426T230500	2018	04	26	23:05	36.3	92.3	0
20180426T231000	2018	04	26	23:10	37.5	96.7	0
20180426T231500	2018	04	26	23:15	37.5	96.1	0
20180426T232000	2018	04	26	23:20	36.9	93.4	0
20180426T232500	2018	04	26	23:25	37.6	95.4	0

Table C-2: Winter SUNY MesoNet Meteorological Data (Johnstown Station)

Raw Date/Time	Year	Month	Day	Time	Temperature [F]	Relative Humidity [%]	Precipitation [in]
20180426T233000	2018	04	26	23:30	37.6	96.9	0
20180426T233500	2018	04	26	23:35	36.9	96.2	0
20180426T234000	2018	04	26	23:40	36.9	97.4	0
20180426T234500	2018	04	26	23:45	36.1	97.5	0
20180426T235000	2018	04	26	23:50	36.3	97.6	0
20180426T235500	2018	04	26	23:55	36.3	98.4	0
20180427T000000	2018	04	27	00:00	35.3	97.4	0

Appendix D
Detailed Sound Model Input Information

Table D-1: Point Sources in the Cadna/A Model

Name	ID	Relative Source Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Source Height
			X	Y	Z
		(m)	(m)	(m)	(m)
Collector Substation	Substation	4	570945.9	4750344.0	151.6
Inverter	1	2.2	569234.7	4750742.0	170.4
Inverter	2	2.2	570029.8	4750373.5	188.9
Inverter	3	2.2	569807.3	4750372.2	187.0
Inverter	4	2.2	571002.7	4750326.3	148.8
Inverter	5	2.2	569239.6	4750315.1	185.2
Inverter	6	2.2	568965.6	4750279.9	185.2
Inverter	7	2.2	570033.0	4750149.8	188.5
Inverter	8	2.2	569586.2	4750147.1	184.6
Inverter	9	2.2	568984.7	4750001.2	186.2
Inverter	10	2.2	571418.4	4749917.1	164.4
Inverter	11	2.2	569149.1	4749835.9	187.8
Inverter	12	2.2	569273.4	4749827.4	187.9
Inverter	13	2.2	569927.6	4749776.3	190.0
Inverter	14	2.2	569589.7	4749758.5	194.2
Inverter	15	2.2	569150.1	4749670.4	192.9
Inverter	16	2.2	571370.3	4749595.4	187.4
Inverter	17	2.2	571405.7	4749435.9	201.2
Inverter	18	2.2	571850.6	4749244.4	206.6
Inverter	19	2.2	571406.8	4749241.8	216.5
Inverter	20	2.2	571127.4	4749142.3	225.7
Inverter	21	2.2	570812.2	4749131.1	229.5
Inverter	22	2.2	571270.6	4749038.9	241.8
Inverter	23	2.2	569843.5	4748914.9	250.6
Inverter	24	2.2	569653.0	4748722.5	263.5
Inverter	25	2.2	568616.4	4748719.9	231.3
Inverter	26	2.2	568412.5	4748718.7	226.5
Inverter	27	2.2	570097.9	4748531.0	281.5
Inverter	28	2.2	569876.0	4748529.7	274.5

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
1	72.-1-15	Non-Participating	Year-Round Residence	1.5	569876.4	4751052.9	138.2
2	72.-1-8	Non-Participating	Year-Round Residence	1.5	569091.7	4751745.2	89.8
3	72.-1-7.2	Non-Participating	Unknown	1.5	568943.2	4751628.9	116.9
4	72.-1-5	Non-Participating	Year-Round Residence	1.5	568765.9	4751745.1	101.8
5	73.-1-3	Non-Participating	Year-Round Residence	1.5	571282.8	4751161.1	87.0
6	73.-1-5	Non-Participating	Year-Round Residence	1.5	571504.1	4751087.4	83.4
7	73.4-1-1	Non-Participating	Year-Round Residence	1.5	572330.5	4750641.7	101.6
8	73.4-1-2	Non-Participating	Year-Round Residence	1.5	572415.5	4750611.4	103.0
9	73.4-1-5	Non-Participating	Year-Round Residence	1.5	572979.3	4750587.0	101.4
10	73.4-1-7	Non-Participating	Year-Round Residence	1.5	573021.1	4750568.2	103.4
11	73.4-1-6	Non-Participating	Year-Round Residence	1.5	573062.5	4750545.3	103.5
12	72.-1-17	Non-Participating	Year-Round Residence	1.5	569524.0	4750447.6	182.8
13	72.-1-18	Participating	Year-Round Residence	1.5	569470.3	4750326.4	184.6
14	72.-1-53	Non-Participating	Year-Round Residence	1.5	569440.2	4750949.5	175.5
15	72.-1-13	Non-Participating	Year-Round Residence	1.5	569657.9	4751219.5	131.6
16	72.-1-59	Non-Participating	Year-Round Residence	1.5	569637.2	4751255.1	129.3
17	72.-1-12	Non-Participating	Year-Round Residence	1.5	569616.8	4751281.7	128.4
18	72.-1-54	Non-Participating	Year-Round Residence	1.5	569001.6	4751753.7	98.7
19	72.-1-7.1	Non-Participating	Year-Round Residence	1.5	568953.5	4751703.0	105.0
20	72.-1-7.1	Non-Participating	Year-Round Residence	1.5	568968.9	4751687.0	105.9
21	72.-1-7.3	Non-Participating	Unknown	1.5	568839.3	4751716.1	105.1
22	73.-1-6.2	Non-Participating	Year-Round Residence	1.5	571684.3	4751002.0	85.1
23	73.-1-40	Non-Participating	Year-Round Residence	1.5	571711.4	4750985.7	86.4
24	73.-1-8	Non-Participating	Unknown	1.5	571751.2	4750950.6	89.0
25	73.4-1-9	Non-Participating	Unknown	1.5	573141.3	4750526.1	104.2
26	89.-1-19.12	Non-Participating	Year-Round Residence	1.5	572327.6	4749300.3	201.2
27	89.-1-47	Non-Participating	Year-Round Residence	1.5	572084.9	4749382.5	197.1
28	88.-1-23	Non-Participating	Year-Round Residence	1.5	569442.0	4748878.7	249.2
29	89.-1-9.2	Non-Participating	Year-Round Residence	1.5	572033.5	4749443.9	192.9
30	72.-1-29	Non-Participating	Unknown	1.5	568264.9	4750086.1	187.6
31	89.-1-17	Non-Participating	Year-Round Residence	1.5	572177.5	4749579.8	184.3
32	88.-1-24.2	Non-Participating	Year-Round Residence	1.5	569446.6	4748767.0	255.7
33	89.-1-8.11	Participating	Unknown	1.5	571797.8	4749527.0	185.9
34	89.-1-11	Non-Participating	Year-Round Residence	1.5	571947.5	4749538.1	187.5
35	88.-1-32	Non-Participating	Year-Round Residence	1.5	569111.7	4748348.9	253.9
36	89.-1-12	Non-Participating	Year-Round Residence	1.5	572064.5	4749494.0	191.1
37	89.-1-4	Non-Participating	Year-Round Residence	1.5	570876.8	4749847.0	172.8
38	89.-1-5	Non-Participating	Year-Round Residence	1.5	570986.4	4749841.2	167.3
39	88.-1-33	Non-Participating	Year-Round Residence	1.5	568959.0	4748022.5	250.5
40	73.-1-46.2	Non-Participating	Year-Round Residence	1.5	570422.0	4749520.3	200.2
41	88.-1-18	Non-Participating	Year-Round Residence	1.5	569669.9	4749038.1	235.9
42	88.-1-7	Non-Participating	Year-Round Residence	1.5	567888.5	4749797.9	191.8
43	104.-1-3.2	Non-Participating	Unknown	1.5	568611.4	4747212.3	242.4
44	104.-1-4.1	Non-Participating	Year-Round Residence	1.5	568489.1	4747519.3	241.5
45	57.3-1-27	Non-Participating	Year-Round Residence	1.5	570790.5	4752329.1	90.4
46	104.-1-4.2	Non-Participating	Year-Round Residence	1.5	568550.2	4747544.8	241.8
47	88.-1-6	Non-Participating	Year-Round Residence	1.5	567865.2	4749673.7	193.5
48	104.-1-6.1	Non-Participating	Year-Round Residence	1.5	568591.2	4747567.5	243.2
49	104.-1-6.2	Non-Participating	Year-Round Residence	1.5	568639.1	4747589.8	245.4
50	89.-1-46.1	Non-Participating	Year-Round Residence	1.5	571277.9	4749688.7	178.5
51	56.4-1-34	Non-Participating	Year-Round Residence	1.5	568847.7	4752520.7	91.9
52	89.-1-46.2	Non-Participating	Year-Round Residence	1.5	571154.5	4749594.9	185.3
53	56.4-1-45	Non-Participating	Year-Round Residence	1.5	568629.5	4752582.0	92.3
54	56.4-1-46	Non-Participating	Year-Round Residence	1.5	568612.4	4752587.9	92.4
55	56.4-1-47	Non-Participating	Year-Round Residence	1.5	568576.8	4752595.0	91.6
56	56.4-1-33	Non-Participating	Year-Round Residence	1.5	568859.4	4752517.9	92.0
57	56.4-1-75	Non-Participating	Year-Round Residence	1.5	568531.6	4752604.5	92.4
58	56.4-1-74	Non-Participating	Year-Round Residence	1.5	568465.3	4752673.7	103.3

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
59	73.2-1-21	Non-Participating	Year-Round Residence	1.5	572321.6	4751532.7	143.7
60	56.4-1-72	Non-Participating	Seasonal Residence	1.5	568418.6	4752696.3	104.5
61	56.4-1-31	Non-Participating	Year-Round Residence	1.5	568875.6	4752518.5	93.2
62	56.4-1-72	Non-Participating	Seasonal Residence	1.5	568398.9	4752701.4	103.0
63	56.4-1-69	Non-Participating	Year-Round Residence	1.5	568369.1	4752701.1	99.8
64	73.1-1-25	Non-Participating	Year-Round Residence	1.5	570913.8	4751988.6	84.5
65	56.4-1-76	Non-Participating	Year-Round Residence	1.5	569082.1	4752771.9	130.7
66	56.4-1-30	Non-Participating	Year-Round Residence	1.5	568907.6	4752505.8	92.0
67	56.4-1-61	Non-Participating	Year-Round Residence	1.5	569092.7	4752804.3	130.8
68	56.4-1-37	Non-Participating	Year-Round Residence	1.5	568801.0	4752532.6	91.5
69	56.4-1-36	Non-Participating	Year-Round Residence	1.5	568815.7	4752529.7	91.9
70	56.4-1-27	Non-Participating	Year-Round Residence	1.5	568984.2	4752538.6	101.1
71	73.1-1-26	Non-Participating	Year-Round Residence	1.5	570930.7	4751985.1	84.5
72	56.4-1-25	Non-Participating	Year-Round Residence	1.5	569017.5	4752535.0	105.3
73	56.4-1-20	Non-Participating	Year-Round Residence	1.5	569058.7	4752462.4	92.4
74	56.4-1-19	Non-Participating	Year-Round Residence	1.5	569075.2	4752458.6	91.7
75	73.1-1-34.11	Non-Participating	Year-Round Residence	1.5	572032.9	4751754.4	154.5
76	73.1-1-28	Non-Participating	Year-Round Residence	1.5	570962.9	4751977.6	84.3
77	73.1-1-29	Non-Participating	Year-Round Residence	1.5	570980.5	4751971.2	84.0
78	73.1-1-33.1	Non-Participating	Unknown	1.5	571987.7	4751800.2	154.5
79	73.-1-48	Non-Participating	Year-Round Residence	1.5	573380.6	4750282.7	103.6
80	73.-1-48	Non-Participating	Year-Round Residence	1.5	573433.3	4750244.5	105.0
81	89.-1-8.12	Non-Participating	Year-Round Residence	1.5	571701.8	4749407.3	193.9
82	89.-1-18	Non-Participating	Year-Round Residence	1.5	572571.6	4749673.0	165.2
83	89.-1-3	Non-Participating	Year-Round Residence	1.5	570739.3	4749840.4	180.1
84	88.-1-24.1	Participating	Unknown	1.5	569760.3	4749026.8	238.3
85	89.-1-6	Non-Participating	Year-Round Residence	1.5	570902.0	4749780.1	172.8
86	73.-1-46.3	Non-Participating	Year-Round Residence	1.5	570457.8	4749533.7	199.5
87	72.-1-31.2	Non-Participating	Year-Round Residence	1.5	568144.5	4749953.2	190.5
88	88.-1-19	Non-Participating	Year-Round Residence	1.5	569631.6	4749014.2	237.4
89	88.-1-25	Non-Participating	Year-Round Residence	1.5	569415.1	4748678.5	260.1
90	88.-1-30.2	Non-Participating	Year-Round Residence	1.5	569428.1	4747995.0	272.2
91	72.-1-31.12	Non-Participating	Year-Round Residence	1.5	568048.1	4749868.5	188.7
92	72.-1-3	Non-Participating	Public	1.5	567848.4	4752102.0	95.1
93	88.-1-61	Non-Participating	Year-Round Residence	1.5	569022.4	4748078.2	252.2
94	72.-1-31.12	Non-Participating	Year-Round Residence	1.5	568051.5	4749798.7	175.9
95	88.-1-69	Non-Participating	Year-Round Residence	1.5	568728.7	4747747.8	247.7
96	104.-1-5.2	Non-Participating	Year-Round Residence	1.5	568585.7	4747680.0	246.1
97	104.-1-5.1	Non-Participating	Year-Round Residence	1.5	568389.5	4747575.9	238.5
98	104.-1-7.1	Non-Participating	Public	1.5	569590.2	4747825.9	280.6
99	88.-1-9.1	Non-Participating	Public	1.5	568171.2	4749475.1	200.3
100	104.-1-7.1	Non-Participating	Public	1.5	569612.2	4747904.7	281.3
101	56.4-1-60	Non-Participating	Year-Round Residence	1.5	569105.3	4752834.7	133.0
102	88.-1-24.1	Participating	Public	1.5	570176.1	4748801.0	272.5
103	88.-1-10	Non-Participating	Year-Round Residence	1.5	568269.9	4749416.8	203.1
104	89.-1-44.2	Non-Participating	Year-Round Residence	1.5	570501.4	4748524.9	298.5
105	89.-1-44.1	Non-Participating	Public	1.5	570370.3	4748493.9	295.5
106	89.-1-44.1	Non-Participating	Public	1.5	570443.5	4748526.1	296.2
107	88.-1-9.2	Non-Participating	Year-Round Residence	1.5	568324.9	4749349.2	206.2
108	89.-1-8.11	Participating	Public	1.5	571050.0	4749359.9	207.5
109	73.-1-30	Non-Participating	Year-Round Residence	1.5	570804.7	4750125.5	164.5
110	88.-1-65.1	Non-Participating	Year-Round Residence	1.5	568510.0	4749412.2	203.3
111	56.4-1-57	Non-Participating	Year-Round Residence	1.5	569058.2	4752858.0	134.3
112	88.-1-65.2	Non-Participating	Year-Round Residence	1.5	568490.9	4749300.2	207.4
113	88.-1-41.2	Non-Participating	Year-Round Residence	1.5	568448.3	4749188.1	211.5
114	73.-1-13	Non-Participating	Public	1.5	572056.8	4750775.1	94.8
115	88.-1-40	Non-Participating	Year-Round Residence	1.5	568520.7	4749125.9	213.2
116	56.4-1-58.2	Non-Participating	Year-Round Residence	1.5	569040.6	4752804.6	132.2

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
117	72.-1-44	Non-Participating	Year-Round Residence	1.5	567275.0	4751464.6	141.2
118	56.4-1-29	Non-Participating	Year-Round Residence	1.5	568941.2	4752495.2	92.0
119	72.-1-45	Non-Participating	Year-Round Residence	1.5	567273.9	4751485.1	141.7
120	72.-1-2	Non-Participating	Year-Round Residence	1.5	567750.1	4752130.7	103.4
121	56.4-1-28	Non-Participating	Year-Round Residence	1.5	568972.6	4752492.7	93.1
122	56.4-1-23	Non-Participating	Year-Round Residence	1.5	569012.1	4752482.0	93.5
123	56.4-1-21	Non-Participating	Year-Round Residence	1.5	569034.3	4752476.1	93.8
124	89.-1-37	Non-Participating	Public	1.5	570968.8	4747358.0	307.5
125	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572740.0	4749821.1	147.2
126	89.-1-20	Non-Participating	Year-Round Residence	1.5	572899.9	4749689.2	147.9
127	88.-1-37.11	Non-Participating	Public	1.5	569386.4	4748827.5	251.7
128	89.-1-21	Non-Participating	Year-Round Residence	1.5	573037.7	4749750.9	142.9
129	89.-1-22.1	Non-Participating	Year-Round Residence	1.5	573514.9	4749609.4	140.8
130	89.-1-22.2	Non-Participating	Public	1.5	573418.1	4749653.7	141.4
131	88.-1-36	Non-Participating	Year-Round Residence	1.5	569204.6	4748614.4	254.8
132	73.-1-20.11	Non-Participating	Year-Round Residence	1.5	572071.1	4749860.3	159.4
133	73.-1-18.2	Non-Participating	Year-Round Residence	1.5	572150.3	4749829.7	159.4
134	88.-1-8	Non-Participating	Year-Round Residence	1.5	567898.8	4749472.4	197.8
135	89.-1-16	Non-Participating	Year-Round Residence	1.5	572164.0	4749694.6	175.4
136	73.-1-32	Non-Participating	Year-Round Residence	1.5	570761.9	4750201.0	162.0
137	73.-1-20.12	Non-Participating	Unknown	1.5	572108.7	4749706.2	174.1
138	73.-1-49	Non-Participating	Year-Round Residence	1.5	571317.5	4750220.8	146.3
139	73.-1-28.2	Non-Participating	Year-Round Residence	1.5	571168.7	4750042.1	154.8
140	73.-1-33	Non-Participating	Year-Round Residence	1.5	570699.7	4750286.8	157.5
141	73.-1-22	Non-Participating	Year-Round Residence	1.5	571140.3	4749988.5	158.8
142	73.-1-21	Non-Participating	Year-Round Residence	1.5	571087.9	4749888.5	164.4
143	73.-1-43	Non-Participating	Year-Round Residence	1.5	571206.9	4749823.4	168.8
144	73.-1-31.1	Participating	Public	1.5	570354.7	4750012.7	175.8
145	73.-1-42	Non-Participating	Year-Round Residence	1.5	571349.1	4749789.9	172.5
146	73.-1-24	Non-Participating	Year-Round Residence	1.5	570966.0	4749992.8	164.0
147	88.-1-58	Non-Participating	Year-Round Residence	1.5	567692.7	4749312.4	205.5
148	73.-1-23	Non-Participating	Year-Round Residence	1.5	571002.4	4749947.0	164.2
149	72.-1-20	Non-Participating	Year-Round Residence	1.5	568587.9	4750965.4	161.3
150	89.-1-1	Non-Participating	Year-Round Residence	1.5	570747.2	4749752.3	182.5
151	88.-1-14	Non-Participating	Year-Round Residence	1.5	570295.3	4749481.4	203.2
152	88.-1-13	Participating	Year-Round Residence	1.5	569899.1	4749419.8	208.5
153	72.-1-19	Non-Participating	Year-Round Residence	1.5	568569.9	4750843.0	163.5
154	88.-1-21	Non-Participating	Unknown	1.5	569564.7	4748956.7	243.4
155	56.4-1-54	Non-Participating	Year-Round Residence	1.5	568847.8	4752692.3	124.0
156	72.-1-26	Non-Participating	Year-Round Residence	1.5	568273.2	4750195.9	187.8
157	88.-1-57	Non-Participating	Year-Round Residence	1.5	567640.6	4749265.6	205.6
158	72.-1-28	Non-Participating	Year-Round Residence	1.5	568312.3	4750143.1	187.6
159	88.-1-56	Non-Participating	Year-Round Residence	1.5	567594.4	4749243.3	206.1
160	56.4-2-8	Non-Participating	Year-Round Residence	1.5	569844.9	4752385.7	123.2
161	88.-1-55	Non-Participating	Year-Round Residence	1.5	567558.7	4749219.4	206.6
162	56.4-1-55	Non-Participating	Year-Round Residence	1.5	568927.4	4752694.0	126.4
163	88.-1-42	Non-Participating	Year-Round Residence	1.5	567887.6	4748293.8	229.1
164	72.-1-33.1	Non-Participating	Year-Round Residence	1.5	567829.2	4750073.0	190.5
165	72.-1-32	Non-Participating	Year-Round Residence	1.5	567854.4	4750001.6	190.5
166	56.4-1-66	Non-Participating	Year-Round Residence	1.5	568960.8	4752681.3	126.6
167	88.-1-5	Non-Participating	Year-Round Residence	1.5	567793.5	4749961.8	191.8
168	88.-1-4	Non-Participating	Year-Round Residence	1.5	567758.9	4750004.2	191.5
169	88.-1-3	Non-Participating	Year-Round Residence	1.5	567731.1	4750072.4	190.9
170	56.4-1-18.12	Non-Participating	Year-Round Residence	1.5	569255.6	4752649.0	117.9
171	72.-1-36.12	Non-Participating	Year-Round Residence	1.5	567585.8	4750216.3	190.5
172	56.4-2-7	Non-Participating	Year-Round Residence	1.5	569879.1	4752379.9	122.9
173	72.-1-11	Non-Participating	Public	1.5	569542.0	4752016.1	82.5
174	56.4-2-14	Non-Participating	Year-Round Residence	1.5	569297.8	4752760.0	130.0

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
175	73.1-1-3	Non-Participating	Public	1.5	570590.4	4752068.1	84.0
176	56.4-2-6	Non-Participating	Year-Round Residence	1.5	569810.0	4752510.3	122.4
177	56.4-2-12.1	Non-Participating	Unknown	1.5	569305.0	4752805.0	133.9
178	57.3-1-37.1	Non-Participating	Year-Round Residence	1.5	570469.6	4752147.2	86.3
179	73.1-1-1	Non-Participating	Public	1.5	570594.7	4752115.7	84.4
180	73.1-1-23	Non-Participating	Year-Round Residence	1.5	570631.5	4752070.1	85.7
181	73.1-1-44	Non-Participating	Public	1.5	570640.3	4752158.1	86.8
182	73.1-1-22	Non-Participating	Year-Round Residence	1.5	570648.6	4752117.4	86.9
183	73.1-1-21	Non-Participating	Year-Round Residence	1.5	570664.2	4752131.9	87.5
184	73.1-1-20	Non-Participating	Year-Round Residence	1.5	570673.0	4752148.8	87.9
185	73.1-1-6	Non-Participating	Year-Round Residence	1.5	570640.7	4752176.6	86.8
186	73.1-1-19	Non-Participating	Year-Round Residence	1.5	570677.4	4752164.6	88.3
187	73.1-1-16	Non-Participating	Year-Round Residence	1.5	570712.7	4752229.5	91.3
188	73.1-1-10	Non-Participating	Year-Round Residence	1.5	570657.9	4752210.6	87.7
189	73.1-1-11	Non-Participating	Year-Round Residence	1.5	570669.0	4752220.5	88.4
190	73.-1-27	Non-Participating	Year-Round Residence	1.5	571232.6	4750542.2	136.5
191	73.-1-6.1	Non-Participating	Year-Round Residence	1.5	571608.6	4750951.0	98.8
192		Non-Participating	Public	1.5	568362.7	4751682.3	116.6
193	72.-1-34	Non-Participating	Public	1.5	567744.9	4750167.7	189.5
194	89.-1-38	Non-Participating	Year-Round Residence	1.5	570834.0	4747298.1	306.4
195	73.-1-44	Non-Participating	Year-Round Residence	1.5	571253.4	4750153.8	150.8
196	104.-1-9	Non-Participating	Year-Round Residence	1.5	570720.7	4747177.5	304.5
197	73.-1-28.1	Participating	Seasonal Residence	1.5	571131.8	4750132.5	149.2
198	104.-1-17	Non-Participating	Year-Round Residence	1.5	570403.6	4746898.3	294.5
199	88.-1-37.2	Non-Participating	Unknown	1.5	569257.7	4748905.6	241.6
200	104.-1-16	Non-Participating	Year-Round Residence	1.5	570444.4	4746893.0	294.4
201	73.-1-31.22	Non-Participating	Year-Round Residence	1.5	570673.9	4749725.4	186.9
202	104.-1-15.1	Non-Participating	Year-Round Residence	1.5	570544.2	4746908.9	296.7
203	73.-1-46.11	Non-Participating	Year-Round Residence	1.5	570325.9	4749494.8	202.7
204	104.-1-13	Non-Participating	Unknown	1.5	570640.9	4746963.2	296.3
205	104.-1-9	Non-Participating	Year-Round Residence	1.5	570673.6	4746983.2	295.2
206	88.-1-15	Non-Participating	Year-Round Residence	1.5	569803.9	4749130.3	230.1
207	88.-1-26	Non-Participating	Year-Round Residence	1.5	569146.4	4748470.6	254.2
208	104.-1-18.2	Non-Participating	Year-Round Residence	1.5	570306.5	4746795.6	290.4
209	88.-1-60	Non-Participating	Year-Round Residence	1.5	567872.6	4749460.8	199.6
210	89.-1-40.1	Non-Participating	Year-Round Residence	1.5	570959.4	4747906.9	301.9
211	88.-1-34	Non-Participating	Year-Round Residence	1.5	569091.2	4748469.2	253.5
212	89.-1-40.2	Non-Participating	Year-Round Residence	1.5	570983.5	4747947.3	304.6
213	88.-1-35	Non-Participating	Year-Round Residence	1.5	569004.3	4748579.2	247.8
214	89.-1-43	Non-Participating	Year-Round Residence	1.5	570873.1	4748201.1	313.5
215	89.-1-45	Non-Participating	Year-Round Residence	1.5	570837.6	4748244.4	312.8
216	88.-1-66	Non-Participating	Year-Round Residence	1.5	567898.4	4749374.7	202.5
217	73.-1-37	Participating	Public	1.5	570554.0	4750310.6	161.6
218	56.18-1-1	Non-Participating	Public	1.5	568075.9	4752556.4	83.4
219	73.-1-34	Non-Participating	Unknown	1.5	570843.1	4750478.5	151.8
220	88.-1-67	Non-Participating	Year-Round Residence	1.5	567915.9	4749336.4	202.8
221	73.-1-36	Non-Participating	Year-Round Residence	1.5	570539.6	4750606.3	163.4
222	73.-1-38	Non-Participating	Year-Round Residence	1.5	570500.4	4750670.5	163.1
223	88.-1-71	Non-Participating	Year-Round Residence	1.5	567944.6	4749268.2	203.5
224	72.-1-25	Non-Participating	Unknown	1.5	568375.2	4750338.3	184.8
225	88.-1-59	Non-Participating	Year-Round Residence	1.5	567779.8	4749367.8	202.8
226	88.-1-2.12	Non-Participating	Year-Round Residence	1.5	567703.1	4749411.6	202.7
227	88.-1-54	Non-Participating	Year-Round Residence	1.5	567437.8	4749126.6	208.5
228	88.-1-53	Non-Participating	Year-Round Residence	1.5	567395.2	4749095.6	209.6
229	56.3-1-23	Non-Participating	Unknown	1.5	568223.0	4752734.1	98.3
230	88.-1-47	Non-Participating	Public	1.5	567865.9	4748367.8	229.5
231	72.-1-36.2	Non-Participating	Year-Round Residence	1.5	567605.6	4750119.2	191.2
232	56.4-1-16	Non-Participating	Year-Round Residence	1.5	569229.3	4752739.5	127.4

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
233	72.-1-39.12	Non-Participating	Public	1.5	567334.4	4750574.3	184.5
234	72.-1-39.11	Non-Participating	Year-Round Residence	1.5	567305.8	4750627.3	184.5
235	56.4-2-11	Non-Participating	Year-Round Residence	1.5	569763.2	4752389.7	118.4
236	73.-1-39	Non-Participating	Public	1.5	569927.1	4751691.9	86.8
237		Non-Participating	Public	1.5	570159.5	4751921.2	79.5
238	73.1-1-7	Non-Participating	Year-Round Residence	1.5	570649.6	4752189.6	87.4
239	73.1-1-9	Non-Participating	Year-Round Residence	1.5	570654.3	4752199.9	87.6
240	73.1-1-18	Non-Participating	Year-Round Residence	1.5	570687.5	4752185.8	89.1
241	73.1-1-17	Non-Participating	Year-Round Residence	1.5	570698.9	4752211.4	90.3
242	89.-1-36.13	Non-Participating	Year-Round Residence	1.5	570806.8	4747367.9	304.7
243	73.-1-29	Non-Participating	Year-Round Residence	1.5	570876.8	4750015.5	167.7
244	89.-1-36.111	Non-Participating	Year-Round Residence	1.5	570753.5	4747395.5	304.5
245	73.-1-31.21	Non-Participating	Year-Round Residence	1.5	570611.4	4749669.7	190.8
246	89.-1-39	Non-Participating	Year-Round Residence	1.5	570828.3	4747616.5	294.6
247	88.-1-37.12	Non-Participating	Year-Round Residence	1.5	569293.0	4748701.7	256.1
248	89.-1-33.11	Non-Participating	Year-Round Residence	1.5	571541.6	4748220.9	310.5
249	73.-1-46.12	Non-Participating	Year-Round Residence	1.5	570373.9	4749512.8	200.9
250	89.-1-32.2	Non-Participating	Year-Round Residence	1.5	572152.9	4748582.6	251.5
251	89.-1-34	Non-Participating	Year-Round Residence	1.5	571774.9	4748195.4	306.6
252	89.-1-28.1	Non-Participating	Year-Round Residence	1.5	572393.5	4748198.4	277.2
253	88.-1-16	Non-Participating	Year-Round Residence	1.5	569728.1	4749085.8	233.2
254	89.-1-28.4	Non-Participating	Year-Round Residence	1.5	572532.8	4748449.6	253.5
255	57.3-1-28	Non-Participating	Year-Round Residence	1.5	570802.4	4752341.9	91.6
256	89.-1-29	Non-Participating	Year-Round Residence	1.5	572322.8	4748674.3	226.2
257	89.-1-30	Non-Participating	Year-Round Residence	1.5	572475.0	4748945.7	214.8
258	88.-1-39	Participating	Public	1.5	568697.6	4748407.6	238.9
259	89.-1-28.7	Non-Participating	Year-Round Residence	1.5	572457.8	4748744.7	217.4
260	89.-1-28.9	Non-Participating	Unknown	1.5	572537.4	4749013.6	207.0
261	89.-1-15	Non-Participating	Year-Round Residence	1.5	572277.4	4749489.2	190.0
262	72.-1-43	Non-Participating	Year-Round Residence	1.5	567291.2	4751402.1	140.5
263	89.-1-19.11	Non-Participating	Unknown	1.5	572359.8	4749488.4	187.7
264	57.3-1-26	Non-Participating	Year-Round Residence	1.5	570820.4	4752315.6	95.6
265	89.-1-48	Non-Participating	Year-Round Residence	1.5	572476.4	4749562.9	179.5
266	56.4-1-65	Non-Participating	Year-Round Residence	1.5	568986.1	4752652.3	125.6
267	89.-1-13	Non-Participating	Year-Round Residence	1.5	572129.1	4749426.6	194.5
268	56.4-1-64	Non-Participating	Year-Round Residence	1.5	569018.2	4752677.5	125.8
269	73.1-1-45	Non-Participating	Year-Round Residence	1.5	571413.4	4751717.6	85.6
270	56.4-1-63	Non-Participating	Year-Round Residence	1.5	569047.2	4752666.4	125.4
271	57.3-1-25	Non-Participating	Year-Round Residence	1.5	570838.8	4752353.6	95.8
272	56.4-1-62	Non-Participating	Year-Round Residence	1.5	569066.4	4752719.4	128.6
273	56.4-1-39.1	Non-Participating	Year-Round Residence	1.5	568750.2	4752555.2	92.6
274	56.4-1-40	Non-Participating	Year-Round Residence	1.5	568719.1	4752558.0	92.5
275	57.3-1-24	Non-Participating	Year-Round Residence	1.5	570838.0	4752436.2	96.6
276	56.4-1-41	Non-Participating	Year-Round Residence	1.5	568702.4	4752563.1	92.8
277	56.4-1-42	Non-Participating	Year-Round Residence	1.5	568688.8	4752565.1	92.6
278	56.4-1-43	Non-Participating	Year-Round Residence	1.5	568673.4	4752570.6	92.8
279	57.3-1-29	Non-Participating	Year-Round Residence	1.5	570789.9	4752380.8	94.3
280	56.4-1-44	Non-Participating	Year-Round Residence	1.5	568658.5	4752576.6	93.1
281	73.1-1-12	Non-Participating	Year-Round Residence	1.5	570677.6	4752235.2	88.4
282	73.1-1-36	Non-Participating	Year-Round Residence	1.5	571376.8	4751734.2	83.4
283	73.1-1-13	Non-Participating	Year-Round Residence	1.5	570688.0	4752247.7	87.9
284	57.-1-19	Non-Participating	Public	1.5	570704.1	4752040.9	93.5
285	73.1-1-14	Non-Participating	Year-Round Residence	1.5	570701.9	4752256.2	87.5
286	73.1-1-15	Non-Participating	Unknown	1.5	570714.7	4752263.3	87.3
287	73.1-1-40	Non-Participating	Year-Round Residence	1.5	570809.5	4752018.4	84.7
288	73.1-1-46	Non-Participating	Year-Round Residence	1.5	571341.0	4751749.4	81.8
289	57.-1-18	Non-Participating	Year-Round Residence	1.5	570850.3	4752006.9	83.7
290	73.1-1-24	Non-Participating	Year-Round Residence	1.5	570892.1	4751992.1	83.9

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
291	73.1-1-30	Non-Participating	Year-Round Residence	1.5	571014.9	4751970.5	84.8
292	73.1-1-41	Non-Participating	Public	1.5	571111.4	4751908.2	83.3
293	73.1-1-31	Non-Participating	Unknown	1.5	571304.3	4751778.2	81.9
294	73.1-1-35	Non-Participating	Year-Round Residence	1.5	571679.0	4751671.1	94.4
295	73.-1-4	Non-Participating	Year-Round Residence	1.5	571547.1	4751180.4	79.8
296	73.4-1-4	Non-Participating	Year-Round Residence	1.5	572596.1	4750651.3	93.6
297	72.-1-23	Non-Participating	Year-Round Residence	1.5	568443.9	4750372.7	181.5
298	72.-1-22	Non-Participating	Year-Round Residence	1.5	568483.0	4750427.6	179.1
299	87.-1-9.12	Non-Participating	Year-Round Residence	1.5	566688.4	4749344.8	227.5
300	88.-1-1.1	Non-Participating	Year-Round Residence	1.5	566763.3	4749325.9	227.4
301	88.-3-1	Non-Participating	Year-Round Residence	1.5	567163.4	4748887.9	229.8
302	88.-3-1	Non-Participating	Year-Round Residence	1.5	567069.3	4748853.8	232.4
303	88.-3-1	Non-Participating	Public	1.5	567059.8	4748700.6	240.3
304	88.-1-49	Non-Participating	Year-Round Residence	1.5	566802.3	4748189.2	248.0
305	87.-1-14	Non-Participating	Year-Round Residence	1.5	566642.2	4748163.7	241.5
306	103.-2-7	Non-Participating	Year-Round Residence	1.5	566979.4	4747637.9	260.8
307	88.-1-48.12	Non-Participating	Year-Round Residence	1.5	567099.2	4747774.8	259.5
308	103.-2-5	Non-Participating	Year-Round Residence	1.5	567007.5	4747703.4	260.2
309	88.-2-8	Non-Participating	Year-Round Residence	1.5	567351.8	4747727.9	247.5
310	88.-2-8	Non-Participating	Unknown	1.5	567421.4	4747741.9	243.6
311	88.-2-4	Non-Participating	Year-Round Residence	1.5	567709.6	4747729.5	235.5
312	88.-1-43	Non-Participating	Year-Round Residence	1.5	568056.8	4747559.4	235.5
313	88.-1-63	Non-Participating	Year-Round Residence	1.5	568143.6	4747492.8	235.5
314		Non-Participating	Public	1.5	573576.0	4749828.5	132.5
315	72.-1-21	Non-Participating	Year-Round Residence	1.5	568602.8	4750580.0	169.5
316	88.-1-1.2	Non-Participating	Year-Round Residence	1.5	566730.0	4749483.6	217.6
317	88.-1-52	Non-Participating	Year-Round Residence	1.5	567279.5	4749013.6	213.6
318	88.-3-4	Non-Participating	Year-Round Residence	1.5	567234.8	4748990.5	216.2
319	87.-1-11	Non-Participating	Year-Round Residence	1.5	566706.3	4748690.5	265.1
320	87.-3-10	Non-Participating	Year-Round Residence	1.5	566848.0	4747795.3	256.3
321	103.-2-3	Non-Participating	Year-Round Residence	1.5	567019.4	4747556.4	268.1
322	88.-2-9	Non-Participating	Year-Round Residence	1.5	567170.1	4747588.2	262.5
323	88.-2-6.2	Non-Participating	Year-Round Residence	1.5	567591.6	4747854.9	237.5
324	88.-2-2	Non-Participating	Year-Round Residence	1.5	567725.0	4748032.2	232.5
325	88.-1-47	Non-Participating	Public	1.5	567924.7	4748484.4	226.7
326	88.-1-62	Non-Participating	Year-Round Residence	1.5	567832.7	4747643.4	233.0
327	104.-3-3	Non-Participating	Year-Round Residence	1.5	568603.0	4746920.2	263.4
328	104.-3-4	Non-Participating	Year-Round Residence	1.5	568602.8	4746806.2	266.5
329	104.-3-2	Non-Participating	Year-Round Residence	1.5	568733.8	4746784.2	260.8
330	104.-3-22	Non-Participating	Year-Round Residence	1.5	568379.3	4746530.3	292.4
331	104.-3-5	Non-Participating	Year-Round Residence	1.5	568649.1	4746694.5	266.4
332	104.-3-1.1	Non-Participating	Seasonal Residence	1.5	568665.3	4746559.4	269.3
333	104.-3-9	Non-Participating	Year-Round Residence	1.5	568658.2	4746482.4	271.5
334	104.-1-19.12	Non-Participating	Year-Round Residence	1.5	569416.1	4746629.3	257.4
335	104.-1-19.111	Non-Participating	Year-Round Residence	1.5	569383.9	4746504.3	258.8
336	104.-1-18.1	Non-Participating	Seasonal Residence	1.5	569777.2	4746578.7	265.5
337	18.00-2-16.112	Non-Participating	Year-Round Residence	1.5	570086.0	4746487.5	286.9
338	18.00-2-16.12	Non-Participating	Year-Round Residence	1.5	570214.0	4746605.6	284.3
339	18.00-2-16.312	Non-Participating	Year-Round Residence	1.5	570502.8	4746733.7	295.6
340	88.-1-28	Non-Participating	Public	1.5	569982.7	4747395.1	286.5
341	18.00-2-16.311	Non-Participating	Public	1.5	570636.0	4746880.9	295.5
342	18.00-2-16.311	Non-Participating	Seasonal Residence	1.5	570631.1	4746914.5	295.5
343	18.00-2-18	Non-Participating	Year-Round Residence	1.5	570677.6	4746933.3	294.6
344	18.00-2-16.311	Non-Participating	Year-Round Residence	1.5	570748.9	4746981.0	292.5
345	18.00-2-2	Non-Participating	Year-Round Residence	1.5	570882.1	4747052.8	297.7
346	88.-1-24.1	Participating	Public	1.5	570231.7	4748743.3	278.5
347	73.-1-43	Non-Participating	Public	1.5	571142.5	4749860.4	166.5
348	89.-1-32.1	Non-Participating	Year-Round Residence	1.5	571902.7	4748867.9	266.4

Table D-2: Modeling Receptors in the Cadna/A Model

Receptor ID	Tax Code	Participation Status	Receptor Category	Relative Receptor Height	Coordinates UTM NAD83 Zone 18N (meters)		Elevation + Receptor Height
					X	Y	Z
				(m)	(m)	(m)	(m)
349	73.-1-28.1	Participating	Seasonal Residence	1.5	570990.5	4750073.7	158.9
350	73.-1-38	Non-Participating	Year-Round Residence	1.5	570483.1	4750708.7	162.1
351	72.-1-16.2	Non-Participating	Year-Round Residence	1.5	569936.2	4750675.8	177.2
352	72.-1-15	Non-Participating	Public	1.5	569906.9	4751111.1	135.0
353	73.-1-19	Non-Participating	Year-Round Residence	1.5	572130.0	4749927.8	152.6
354	89.-1-49.2	Non-Participating	Year-Round Residence	1.5	572347.7	4749587.5	180.0
355	89.-1-49.2	Non-Participating	Year-Round Residence	1.5	572389.0	4749601.3	177.8
356	89.-1-49.1	Non-Participating	Year-Round Residence	1.5	572377.9	4749674.0	172.9
357	89.-1-49.1	Non-Participating	Year-Round Residence	1.5	572403.5	4749657.3	173.8
358	89.-1-49.1	Non-Participating	Year-Round Residence	1.5	572449.9	4749684.6	170.0
359	89.-1-49.1	Non-Participating	Year-Round Residence	1.5	572422.8	4749716.0	167.5
360	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572774.5	4749767.3	149.4
361	89.-1-49.1	Non-Participating	Year-Round Residence	1.5	572718.0	4749764.9	150.7
362	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572682.8	4749798.8	150.8
363	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572762.6	4749789.2	148.5
364	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572791.2	4749801.9	146.8
365	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572751.2	4749831.4	146.3
366	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572816.1	4749852.2	143.6
367	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572803.7	4749814.7	145.7
368	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572719.2	4749814.9	148.3
369	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572700.9	4749809.7	149.3
370	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572772.8	4749838.0	145.2
371	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572843.8	4749757.3	146.2
372	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572858.2	4749756.4	145.9
373	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572872.3	4749754.8	145.8
374	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572886.7	4749753.4	145.5
375	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572911.7	4749774.2	144.3
376	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572906.0	4749797.0	143.7
377	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572906.5	4749811.4	143.3
378	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572904.1	4749826.7	143.0
379	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572909.7	4749859.3	142.0
380	89.-1-20	Non-Participating	Year-Round Residence	1.5	572900.6	4749664.7	148.6
381	89.-1-20	Non-Participating	Year-Round Residence	1.5	572878.7	4749643.8	150.1
382	89.-1-20	Non-Participating	Year-Round Residence	1.5	572834.2	4749666.6	150.3
383	89.-1-49.1	Non-Participating	Public	1.5	572739.4	4749725.1	152.3
384	89.-1-19.2	Non-Participating	Year-Round Residence	1.5	572913.1	4749843.0	142.3
385	88.-2-4	Non-Participating	Public	1.5	567635.1	4747727.5	238.1
386	88.-3-1	Non-Participating	Seasonal Residence	1.5	566901.8	4748735.9	244.1
387	88.-1-2.22	Non-Participating	Year-Round Residence	1.5	567027.8	4749137.6	214.5
388	87.-1-10	Non-Participating	Year-Round Residence	1.5	566845.7	4749079.7	225.8
389	87.-1-9.11	Non-Participating	Public	1.5	566757.1	4749026.3	239.8

Appendix E
Sound Level Modeling Results—Short-term

Table E-1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
1	Year-Round Residence	Non-Participating	569876.41	4751052.94	27	28	27	40	31	28	26	22	14	0	0
2	Year-Round Residence	Non-Participating	569091.67	4751745.20	19	23	22	35	25	21	18	12	0	0	0
3	Unknown	Non-Participating	568943.15	4751628.92	24	27	26	39	28	25	23	19	10	0	0
4	Year-Round Residence	Non-Participating	568765.88	4751745.05	19	23	22	35	25	21	18	12	0	0	0
5	Year-Round Residence	Non-Participating	571282.83	4751161.05	19	24	23	35	25	21	18	12	0	0	0
6	Year-Round Residence	Non-Participating	571504.09	4751087.43	22	25	23	36	28	24	21	16	5	0	0
7	Year-Round Residence	Non-Participating	572330.47	4750641.72	22	24	22	36	27	23	21	16	5	0	0
8	Year-Round Residence	Non-Participating	572415.54	4750611.42	20	24	22	35	26	22	19	13	0	0	0
9	Year-Round Residence	Non-Participating	572979.30	4750586.96	19	22	20	34	24	21	18	12	0	0	0
10	Year-Round Residence	Non-Participating	573021.10	4750568.21	19	22	20	34	24	21	18	12	0	0	0
11	Year-Round Residence	Non-Participating	573062.52	4750545.30	18	22	20	33	24	20	18	11	0	0	0
12	Year-Round Residence	Non-Participating	569524.01	4750447.60	40	41	39	53	40	36	37	36	33	21	0
13	Year-Round Residence	Participating	569470.27	4750326.39	44	45	43	57	43	38	39	40	37	26	5
14	Year-Round Residence	Non-Participating	569440.20	4750949.47	35	37	35	49	35	32	32	31	26	11	0
15	Year-Round Residence	Non-Participating	569657.94	4751219.48	24	27	25	39	29	26	23	17	8	0	0
16	Year-Round Residence	Non-Participating	569637.22	4751255.05	24	27	25	38	29	26	23	18	8	0	0
17	Year-Round Residence	Non-Participating	569616.81	4751281.68	24	27	25	39	29	26	24	18	9	0	0
18	Year-Round Residence	Non-Participating	569001.55	4751753.69	22	24	22	36	27	24	21	16	6	0	0
19	Year-Round Residence	Non-Participating	568953.46	4751703.03	20	24	22	36	26	23	20	14	1	0	0
20	Year-Round Residence	Non-Participating	568968.94	4751687.04	21	24	22	36	26	23	20	14	2	0	0
21	Unknown	Non-Participating	568839.30	4751716.12	20	24	22	35	26	22	19	13	1	0	0
22	Year-Round Residence	Non-Participating	571684.32	4751002.03	22	25	23	36	27	24	21	15	3	0	0
23	Year-Round Residence	Non-Participating	571711.42	4750985.73	22	25	23	36	28	24	22	16	4	0	0
24	Unknown	Non-Participating	571751.21	4750950.58	22	25	23	36	28	24	22	16	4	0	0
25	Unknown	Non-Participating	573141.34	4750526.06	18	21	20	33	24	20	17	11	0	0	0
26	Year-Round Residence	Non-Participating	572327.57	4749300.33	28	30	29	42	31	28	27	24	18	0	0
27	Year-Round Residence	Non-Participating	572084.90	4749382.45	38	39	38	52	38	32	34	34	31	19	0
28	Year-Round Residence	Non-Participating	569441.95	4748878.66	40	41	40	53	39	34	36	36	32	20	0
29	Year-Round Residence	Non-Participating	572033.45	4749443.89	38	39	38	52	38	33	34	34	31	19	0
30	Unknown	Non-Participating	568264.94	4750086.08	34	38	36	50	33	29	31	30	23	0	0
31	Year-Round Residence	Non-Participating	572177.45	4749579.83	34	37	35	49	34	30	31	30	25	8	0
32	Year-Round Residence	Non-Participating	569446.59	4748766.97	41	42	40	54	40	35	36	37	34	23	3
33	Unknown	Participating	571797.79	4749526.97	39	40	39	52	39	34	35	35	32	19	0
34	Year-Round Residence	Non-Participating	571947.48	4749538.14	38	39	38	51	38	33	34	34	30	17	0
35	Year-Round Residence	Non-Participating	569111.71	4748348.90	30	31	29	43	31	29	28	26	20	0	0
36	Year-Round Residence	Non-Participating	572064.46	4749493.97	37	38	37	51	37	32	33	33	29	16	0
37	Year-Round Residence	Non-Participating	570876.79	4749847.02	37	39	38	51	38	33	34	33	28	9	0
38	Year-Round Residence	Non-Participating	570986.36	4749841.17	37	39	37	50	38	34	34	32	28	11	0
39	Year-Round Residence	Non-Participating	568959.03	4748022.54	27	30	28	42	29	27	26	23	16	0	0
40	Year-Round Residence	Non-Participating	570421.97	4749520.25	36	39	38	52	36	32	33	33	27	8	0
41	Year-Round Residence	Non-Participating	569669.89	4749038.11	40	41	40	54	40	35	37	36	33	23	3
42	Year-Round Residence	Non-Participating	567888.53	4749797.92	30	35	34	47	30	27	28	26	17	0	0
43	Unknown	Non-Participating	568611.35	4747212.27	20	22	21	34	25	22	19	13	1	0	0
44	Year-Round Residence	Non-Participating	568489.11	4747519.28	21	23	22	35	26	23	20	15	5	0	0
45	Year-Round Residence	Non-Participating	570790.46	4752329.08	18	22	20	33	24	21	18	11	0	0	0
46	Year-Round Residence	Non-Participating	568550.20	4747544.78	21	23	22	35	26	23	20	16	6	0	0
47	Year-Round Residence	Non-Participating	567865.22	4749673.74	29	35	33	47	30	27	27	26	17	0	0
48	Year-Round Residence	Non-Participating	568591.16	4747567.45	22	23	22	36	26	23	21	16	6	0	0
49	Year-Round Residence	Non-Participating	568639.14	4747589.76	22	24	22	36	26	23	21	16	6	0	0
50	Year-Round Residence	Non-Participating	571277.88	4749688.74	41	41	39	53	41	38	38	37	34	24	8
51	Year-Round Residence	Non-Participating	568847.72	4752520.66	19	23	22	35	24	20	18	12	0	0	0
52	Year-Round Residence	Non-Participating	571154.45	4749594.94	40	40	38	52	40	36	36	35	32	21	0
53	Year-Round Residence	Non-Participating	568629.50	4752581.95	18	24	22	36	23	20	17	12	0	0	0
54	Year-Round Residence	Non-Participating	568612.37	4752587.89	18	24	22	36	23	20	17	11	0	0	0
55	Year-Round Residence	Non-Participating	568576.83	4752594.95	18	24	22	36	23	20	17	11	0	0	0
56	Year-Round Residence	Non-Participating	568859.35	4752517.94	19	23	22	35	24	20	18	12	0	0	0
57	Year-Round Residence	Non-Participating	568531.64	4752604.53	18	24	23	36	23	19	17	11	0	0	0
58	Year-Round Residence	Non-Participating	568465.27	4752673.67	18	25	24	37	23	19	17	12	0	0	0
59	Year-Round Residence	Non-Participating	572321.59	4751532.72	24	31	29	43	27	22	22	18	4	0	0
60	Seasonal Residence	Non-Participating	568418.64	4752696.33	18	26	24	38	23	19	17	11	0	0	0
61	Year-Round Residence	Non-Participating	568875.55	4752518.54	19	23	22	35	24	20	18	12	0	0	0
62	Seasonal Residence	Non-Participating	568398.88	4752701.37	18	25	24	38	23	19	17	11	0	0	0
63	Year-Round Residence	Non-Participating	568369.11	4752701.07	18	25	23	37	23	19	17	11	0	0	0
64	Year-Round Residence	Non-Participating	570913.76	4751988.61	22	28	26	40	26	23	21	16	1	0	0
65	Year-Round Residence	Non-Participating	569082.07	4752771.90	20	28	26	40	24	20	18	13	0	0	0
66	Year-Round Residence	Non-Participating	568907.64	4752505.78	19	23	22	35	24	20	18	12	0	0	0
67	Year-Round Residence	Non-Participating	569092.69	4752804.29	20	28	26	40	24	20	18	13	0	0	0
68	Year-Round Residence	Non-Participating	568800.97	4752532.63	19	23	22	35	24	20	17	12	0	0	0
69	Year-Round Residence	Non-Participating	568815.67	4752529.72	19	23	22	35	24	20	18	12	0	0	0
70	Year-Round Residence	Non-Participating	568984.15	4752538.61	19	25	23	37	24	20	18	12	0	0	0
71	Year-Round Residence	Non-Participating	570930.65	4751985.07	22	28	26	40	26	23	21	16	1	0	0
72	Year-Round Residence	Non-Participating	569017.46	4752535.02	19	25	23	37	24	20	18	13	0	0	0
73	Year-Round Residence	Non-Participating	569058.69	4752462.36	19	24	22	36	24	21	18	13	0	0	0
74	Year-Round Residence	Non-Participating	569075.15	4752458.60	19	24	22	36	24	21	18	13	0	0	0
75	Year-Round Residence	Non-Participating	572032.87	4751754.39	23	31	29	42	27	22	22	18	4	0	0
76	Year-Round Residence	Non-Participating	570962.92	4751977.55	22	28	26	40	26	22	21	16	1	0	0
77	Year-Round Residence	Non-Participating	570980.50	4751971.19	22	28	26	40	26	23	21	16	1	0	0
78	Unknown	Non-Participating	571987.72	4751800.17	23	31	29	42	27	22	22	18	4	0	0
79	Year-Round Residence	Non-Participating	573380.58	4750282.73	17	21	19	33	23	19	16	9	0	0	0
80	Year-Round Residence	Non-Participating	573433.33	4750244.45	17	21	19	33	23	19	16	10	0	0	0
81	Year-Round Residence	Non-Participating	571701.79	4749407.25	42	42	40	54	41	36	37	38	35	24	2
82	Year-Round Residence	Non-Participating	572571.58	4749673.02	24	25	23	37	28	25	23	19	10	0	0
83	Year-Round Residence	Non-Participating	570739.32	4749840.37	35	38	36	50	36	32	33	31	25	3	0
84	Unknown	Participating	569760.25	4749026.80	43	43	41	55	43	37	39	39	37	29	14
85	Year-Round Residence	Non-Participating	570902.01	4749780.07	35	36	34	48	36	33	32	31	26	7	0
86	Year-Round Residence	Non-Participating	570457.76	4749533.71	36	39	38	52	36	32	33	33	27	8	0
87	Year-Round Residence	Non-Participating	568144.54	4749953.20	32	37	35	49	32	28	30	29	21	0	0
88	Year-Round Residence	Non-Participating	569631.58	4749014.15	40	41	39	53	40	35	36	36	33	22	0
89	Year-Round Residence	Non-Participating	569415.06	4748678.47	39	40	38	52	39	34	35	35	32	21	0
90	Year-Round Residence	Non-Participating	569428.11	4747994.95	31	34	32	46	31	28	28	27	21	0	0
91	Year-Round Residence	Non-Participating	568048.14	4749868.45	31	35	34	48	31	28	28	27	19	0	0
92	Public	Non-Participating	567848.44	4752102.04	17	21	19	33	23	19	16	10	0	0	0
93	Year-Round Residence	Non-Participating	569022.44	4748078.18	28	30	28	42	30	27	26	23	17	0	0
94	Year-Round Residence	Non-Participating	568051.46	4749798.66	26	26	25	38	29	27	25	21	12	0	0

Table E-1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
95	Year-Round Residence	Non-Participating	568728.69	4747747.82	27	30	29	43	28	25	25	23	16	0	0
96	Year-Round Residence	Non-Participating	568585.66	4747680.03	26	30	28	42	28	24	24	22	15	0	0
97	Year-Round Residence	Non-Participating	568389.52	4747575.92	21	23	22	35	26	23	20	16	6	0	0
98	Public	Non-Participating	569590.18	4747825.90	27	29	28	41	29	26	25	22	14	0	0
99	Public	Non-Participating	568171.18	4749475.13	32	37	35	49	32	29	30	29	22	0	0
100	Public	Non-Participating	569612.16	4747904.70	30	32	31	45	31	27	27	26	20	0	0
101	Year-Round Residence	Non-Participating	569105.30	4752834.74	20	28	26	40	24	20	18	13	0	0	0
102	Public	Participating	570176.10	4748800.96	40	42	40	54	40	34	36	36	33	21	0
103	Year-Round Residence	Non-Participating	568269.88	4749416.75	33	37	36	50	33	29	31	30	23	0	0
104	Year-Round Residence	Non-Participating	570501.36	4748524.92	31	32	30	44	33	30	29	27	21	5	0
105	Public	Non-Participating	570370.25	4748493.89	38	39	37	51	38	33	34	34	31	19	0
106	Public	Non-Participating	570443.52	4748526.07	32	32	31	44	33	31	30	27	23	8	0
107	Year-Round Residence	Non-Participating	568324.87	4749349.20	34	38	36	50	34	30	31	30	24	3	0
108	Public	Participating	571050.00	4749359.91	42	43	41	55	42	36	38	38	35	24	0
109	Year-Round Residence	Non-Participating	570804.68	4750125.53	39	41	40	52	42	36	37	35	31	19	0
110	Year-Round Residence	Non-Participating	568509.97	4749412.15	35	39	37	51	35	31	32	32	26	4	0
111	Year-Round Residence	Non-Participating	569058.22	4752858.04	19	28	26	40	24	20	18	13	0	0	0
112	Year-Round Residence	Non-Participating	568490.94	4749300.23	35	39	37	51	35	31	32	32	26	6	0
113	Year-Round Residence	Non-Participating	568448.25	4749188.07	36	39	37	51	35	31	32	32	27	11	0
114	Public	Non-Participating	572056.82	4750775.08	21	24	23	36	27	23	20	14	3	0	0
115	Year-Round Residence	Non-Participating	568520.71	4749125.93	36	38	37	51	36	31	33	33	29	14	0
116	Year-Round Residence	Non-Participating	569040.58	4752804.64	20	28	26	40	24	20	18	13	0	0	0
117	Year-Round Residence	Non-Participating	567274.95	4751464.62	19	26	24	38	24	20	18	13	0	0	0
118	Year-Round Residence	Non-Participating	568941.24	4752495.21	19	23	22	35	24	20	18	12	0	0	0
119	Year-Round Residence	Non-Participating	567273.88	4751485.12	20	26	25	38	24	20	18	13	0	0	0
120	Year-Round Residence	Non-Participating	567750.08	4752130.74	18	23	22	35	23	19	17	12	0	0	0
121	Year-Round Residence	Non-Participating	568972.57	4752492.68	19	23	22	36	24	20	18	13	0	0	0
122	Year-Round Residence	Non-Participating	569012.08	4752481.96	19	24	22	36	24	21	18	13	0	0	0
123	Year-Round Residence	Non-Participating	569034.25	4752476.07	19	24	22	36	24	21	18	13	0	0	0
124	Public	Non-Participating	570968.78	4747357.96	20	23	21	35	25	22	19	14	1	0	0
125	Year-Round Residence	Non-Participating	572739.97	4749821.10	22	24	22	36	27	24	22	17	7	0	0
126	Year-Round Residence	Non-Participating	572899.93	4749689.24	21	23	22	35	26	23	21	15	5	0	0
127	Public	Non-Participating	569386.40	4748827.47	39	41	39	53	39	34	35	35	31	19	0
128	Year-Round Residence	Non-Participating	573037.69	4749750.94	21	23	21	35	25	22	20	14	3	0	0
129	Year-Round Residence	Non-Participating	573514.91	4749609.38	18	22	20	34	24	20	17	11	0	0	0
130	Public	Non-Participating	573418.06	4749653.73	19	22	21	34	24	20	18	12	0	0	0
131	Year-Round Residence	Non-Participating	569204.55	4748614.37	33	35	33	47	34	31	31	29	24	5	0
132	Year-Round Residence	Non-Participating	572071.13	4749860.32	30	32	30	43	32	29	28	25	18	0	0
133	Year-Round Residence	Non-Participating	572150.30	4749829.72	29	31	30	42	31	28	28	24	17	0	0
134	Year-Round Residence	Non-Participating	567898.75	4749472.43	29	34	33	46	30	27	27	26	18	0	0
135	Year-Round Residence	Non-Participating	572163.98	4749694.57	32	35	34	47	33	29	30	29	23	1	0
136	Year-Round Residence	Non-Participating	570761.86	4750201.02	40	41	40	52	42	36	37	35	31	20	0
137	Unknown	Non-Participating	572108.67	4749706.21	32	35	33	47	33	30	30	28	22	1	0
138	Year-Round Residence	Non-Participating	571317.50	4750220.80	39	41	40	53	40	34	36	35	32	19	0
139	Year-Round Residence	Non-Participating	571168.68	4750042.07	39	40	39	52	40	35	36	35	30	17	0
140	Year-Round Residence	Non-Participating	570699.66	4750286.79	39	41	39	51	42	35	37	34	30	19	0
141	Year-Round Residence	Non-Participating	571140.33	4749988.53	38	40	39	51	40	35	36	34	30	16	0
142	Year-Round Residence	Non-Participating	571087.93	4749888.48	37	39	38	51	39	34	35	33	29	13	0
143	Year-Round Residence	Non-Participating	571206.87	4749823.38	39	40	38	52	39	36	36	34	30	17	0
144	Public	Participating	570354.70	4750012.67	37	38	37	50	37	33	34	33	29	15	0
145	Year-Round Residence	Non-Participating	571349.13	4749789.94	41	41	39	53	41	38	38	36	33	22	5
146	Year-Round Residence	Non-Participating	570965.96	4749992.84	38	40	39	51	40	35	36	34	30	16	0
147	Year-Round Residence	Non-Participating	567692.70	4749312.40	29	34	32	46	29	26	27	25	16	0	0
148	Year-Round Residence	Non-Participating	571002.35	4749946.95	38	40	38	51	39	34	35	34	29	14	0
149	Year-Round Residence	Non-Participating	568587.91	4750965.35	32	35	34	47	32	28	29	28	22	0	0
150	Year-Round Residence	Non-Participating	570747.24	4749752.29	35	37	35	49	36	32	32	31	25	5	0
151	Year-Round Residence	Non-Participating	570295.34	4749481.41	37	39	38	52	36	33	34	33	28	9	0
152	Year-Round Residence	Participating	569899.10	4749419.76	38	40	38	52	38	34	35	34	30	15	0
153	Year-Round Residence	Non-Participating	568569.87	4750842.99	32	35	33	47	32	29	29	28	23	2	0
154	Unknown	Non-Participating	569564.70	4748956.73	41	42	40	54	40	35	37	37	34	23	0
155	Year-Round Residence	Non-Participating	568847.75	4752692.33	20	27	26	39	24	20	18	13	0	0	0
156	Year-Round Residence	Non-Participating	568273.23	4750195.92	34	38	36	50	33	29	31	30	23	0	0
157	Year-Round Residence	Non-Participating	567640.59	4749265.62	28	34	32	46	29	25	26	24	16	0	0
158	Year-Round Residence	Non-Participating	568312.30	4750143.06	34	38	37	50	34	30	31	30	24	2	0
159	Year-Round Residence	Non-Participating	567594.38	4749243.34	28	33	32	46	29	25	26	24	15	0	0
160	Year-Round Residence	Non-Participating	569844.91	4752385.69	21	27	26	39	25	22	19	14	0	0	0
161	Year-Round Residence	Non-Participating	567558.69	4749219.42	28	33	31	45	29	25	25	24	15	0	0
162	Year-Round Residence	Non-Participating	568927.42	4752694.00	20	28	26	40	24	20	18	14	0	0	0
163	Year-Round Residence	Non-Participating	567887.61	4748293.78	30	33	31	45	30	26	27	26	20	0	0
164	Year-Round Residence	Non-Participating	567829.18	4750072.95	29	35	33	47	30	26	27	25	16	0	0
165	Year-Round Residence	Non-Participating	567854.41	4750001.63	30	35	34	47	30	26	27	26	17	0	0
166	Year-Round Residence	Non-Participating	568960.82	4752681.25	20	27	26	39	24	20	18	13	0	0	0
167	Year-Round Residence	Non-Participating	567793.49	4749961.75	29	35	33	47	30	26	27	25	16	0	0
168	Year-Round Residence	Non-Participating	567758.90	4750004.18	29	35	33	47	30	26	27	25	15	0	0
169	Year-Round Residence	Non-Participating	567731.07	4750072.42	29	35	33	47	29	26	26	25	15	0	0
170	Year-Round Residence	Non-Participating	569255.59	4752648.98	19	27	25	39	24	20	18	12	0	0	0
171	Year-Round Residence	Non-Participating	567585.78	4750216.32	28	34	32	46	29	25	26	23	12	0	0
172	Year-Round Residence	Non-Participating	569879.13	4752379.87	21	27	26	39	25	22	20	14	0	0	0
173	Public	Non-Participating	569542.00	4752016.12	20	23	22	35	26	22	19	13	0	0	0
174	Year-Round Residence	Non-Participating	569297.82	4752760.00	20	27	26	39	24	20	18	13	0	0	0
175	Public	Non-Participating	570590.39	4752068.13	21	26	24	38	26	22	20	15	0	0	0
176	Year-Round Residence	Non-Participating	569810.04	4752510.27	21	28	27	40	25	21	20	14	0	0	0
177	Unknown	Non-Participating	569305.03	4752805.00	20	28	26	40	24	20	18	13	0	0	0
178	Year-Round Residence	Non-Participating	570469.61	4752147.17	21	26	24	38	26	22	20	14	0	0	0
179	Public	Non-Participating	570594.72	4752115.73	21	27	25	39	26	22	20	15	0	0	0
180	Year-Round Residence	Non-Participating	570631.53	4752070.08	21	27	25	39	26	22	20	15	0	0	0
181	Public	Non-Participating	570640.26	4752158.08	21	27	26	39	26	22	20	15	0	0	0
182	Year-Round Residence	Non-Participating	570648.56	4752117.38	21	27	26	39	26	22	20	15	0	0	0
183	Year-Round Residence	Non-Participating	570664.18	4752131.94	21	26	25	38	26	22	20	14	0	0	0
184	Year-Round Residence	Non-Participating	570672.98	4752148.82	21	26	25	38	26	22	20	14	0	0	0
185	Year-Round Residence	Non-Participating	570640.73	4752176.63	21	27	26	39	26	22	20	15	0	0	0
186	Year-Round Residence	Non-Participating	570677.42	4752164.58	21	26	24	38	26	22	20	14	0	0	0
187	Year-Round Residence	Non-Participating	570712.67	4752229.46	20	25	23	37	25	21	19	13	0	0	0
188	Year-Round Residence	Non-Participating	570657.92	4752210.57	21	27	25	39	26	22	20	15	0	0	0

Table E-1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
189	Year-Round Residence	Non-Participating	570668.98	4752220.50	20	26	24	38	25	22	19	14	0	0	0
190	Year-Round Residence	Non-Participating	571232.55	4750542.16	38	40	38	51	40	34	35	34	30	17	0
191	Year-Round Residence	Non-Participating	571608.56	4750951.03	24	26	24	37	29	25	23	18	8	0	0
192	Public	Non-Participating	568362.74	4751682.34	21	23	21	35	26	23	20	15	4	0	0
193	Public	Non-Participating	567744.91	4750167.70	28	34	33	46	29	26	26	24	14	0	0
194	Year-Round Residence	Non-Participating	570834.00	4747298.07	20	23	21	35	25	22	19	14	1	0	0
195	Year-Round Residence	Non-Participating	571253.37	4750153.80	39	41	39	52	41	35	36	35	31	19	0
196	Year-Round Residence	Non-Participating	570720.66	4747177.49	20	23	21	35	25	22	19	13	0	0	0
197	Seasonal Residence	Participating	571131.83	4750132.46	36	37	35	48	38	35	35	32	28	16	0
198	Year-Round Residence	Non-Participating	570403.64	4746898.30	18	22	20	33	24	20	17	11	0	0	0
199	Unknown	Non-Participating	569257.69	4748905.61	35	38	36	50	35	32	32	31	25	5	0
200	Year-Round Residence	Non-Participating	570444.44	4746893.04	18	22	20	33	23	20	17	10	0	0	0
201	Year-Round Residence	Non-Participating	570673.93	4749725.35	35	38	36	50	36	32	33	31	26	4	0
202	Year-Round Residence	Non-Participating	570544.19	4746908.91	17	21	20	33	23	19	16	10	0	0	0
203	Year-Round Residence	Non-Participating	570325.87	4749494.82	37	39	38	52	36	33	34	33	28	9	0
204	Unknown	Non-Participating	570640.92	4746963.17	17	21	20	33	23	19	16	10	0	0	0
205	Year-Round Residence	Non-Participating	570673.58	4746983.15	17	21	20	33	23	19	16	10	0	0	0
206	Year-Round Residence	Non-Participating	569803.88	4749130.26	40	41	39	53	40	35	36	36	33	23	2
207	Year-Round Residence	Non-Participating	569146.41	4748470.60	31	32	30	44	32	30	29	26	21	0	0
208	Year-Round Residence	Non-Participating	570306.53	4746795.57	18	21	20	33	23	20	17	10	0	0	0
209	Year-Round Residence	Non-Participating	567872.58	4749460.82	30	35	34	47	30	27	28	26	18	0	0
210	Year-Round Residence	Non-Participating	570959.39	4747906.86	20	24	23	36	26	22	19	13	0	0	0
211	Year-Round Residence	Non-Participating	569091.23	4748469.17	33	34	33	47	33	30	30	29	24	6	0
212	Year-Round Residence	Non-Participating	570983.51	4747947.28	20	24	23	36	26	23	20	14	1	0	0
213	Year-Round Residence	Non-Participating	569004.26	4748579.18	35	36	34	48	35	31	31	31	27	12	0
214	Year-Round Residence	Non-Participating	570873.11	4748201.08	25	27	25	39	29	26	24	20	11	0	0
215	Year-Round Residence	Non-Participating	570837.62	4748244.37	27	30	28	42	30	27	25	22	15	0	0
216	Year-Round Residence	Non-Participating	567898.40	4749374.66	30	35	33	47	31	27	28	27	19	0	0
217	Public	Participating	570554.00	4750310.61	36	39	37	49	38	33	34	32	26	11	0
218	Public	Non-Participating	568075.89	4752556.37	18	24	23	36	23	19	16	11	0	0	0
219	Unknown	Non-Participating	570843.09	4750478.54	42	43	41	53	45	38	39	37	34	24	3
220	Year-Round Residence	Non-Participating	567915.86	4749336.42	30	34	33	47	31	27	28	26	19	0	0
221	Year-Round Residence	Non-Participating	570539.58	4750606.34	32	33	32	45	34	31	30	27	20	0	0
222	Year-Round Residence	Non-Participating	570500.38	4750670.52	31	33	31	45	34	31	30	26	19	0	0
223	Year-Round Residence	Non-Participating	567944.57	4749268.18	30	34	32	46	31	27	27	26	20	0	0
224	Unknown	Non-Participating	568375.18	4750338.33	33	37	36	49	33	30	31	30	23	3	0
225	Year-Round Residence	Non-Participating	567779.76	4749367.81	29	34	33	47	30	26	27	26	17	0	0
226	Year-Round Residence	Non-Participating	567703.11	4749411.58	29	34	33	47	30	26	27	25	16	0	0
227	Year-Round Residence	Non-Participating	567437.83	4749126.57	27	32	31	44	28	24	24	22	13	0	0
228	Year-Round Residence	Non-Participating	567395.20	4749095.60	26	32	30	44	28	24	24	22	13	0	0
229	Unknown	Non-Participating	568222.99	4752734.08	17	24	22	36	23	19	16	10	0	0	0
230	Public	Non-Participating	567865.85	4748367.78	30	33	32	46	30	26	27	26	21	0	0
231	Year-Round Residence	Non-Participating	567605.57	4750119.19	28	34	32	46	29	25	26	24	13	0	0
232	Year-Round Residence	Non-Participating	569229.29	4752739.45	20	27	26	39	24	20	18	13	0	0	0
233	Public	Non-Participating	567334.37	4750574.31	25	32	30	44	27	23	23	20	7	0	0
234	Year-Round Residence	Non-Participating	567305.82	4750627.27	24	32	30	44	27	23	23	19	6	0	0
235	Year-Round Residence	Non-Participating	569763.21	4752389.65	20	25	23	37	25	21	19	13	0	0	0
236	Public	Non-Participating	569927.13	4751691.92	20	24	22	35	26	22	19	12	0	0	0
237	Public	Non-Participating	570159.50	4751921.17	21	23	22	35	26	23	20	14	0	0	0
238	Year-Round Residence	Non-Participating	570649.57	4752189.59	21	27	26	39	26	22	20	15	0	0	0
239	Year-Round Residence	Non-Participating	570654.28	4752199.89	21	27	25	39	26	22	20	15	0	0	0
240	Year-Round Residence	Non-Participating	570687.51	4752185.79	21	26	24	38	25	22	20	14	0	0	0
241	Year-Round Residence	Non-Participating	570698.85	4752211.43	20	25	24	37	25	22	19	13	0	0	0
242	Year-Round Residence	Non-Participating	570806.77	4747367.86	20	23	22	35	26	22	20	14	2	0	0
243	Year-Round Residence	Non-Participating	570876.81	4750015.49	38	40	39	51	40	35	36	34	30	16	0
244	Year-Round Residence	Non-Participating	570753.47	4747395.47	19	23	22	35	25	22	18	12	0	0	0
245	Year-Round Residence	Non-Participating	570611.42	4749669.71	36	38	37	51	36	32	33	32	26	5	0
246	Year-Round Residence	Non-Participating	570828.31	4747616.50	20	24	22	35	26	22	19	13	0	0	0
247	Year-Round Residence	Non-Participating	569293.04	4748701.69	36	39	37	51	36	32	33	33	28	14	0
248	Year-Round Residence	Non-Participating	571541.55	4748220.90	21	25	23	36	26	23	20	14	2	0	0
249	Year-Round Residence	Non-Participating	570373.87	4749512.77	36	39	38	52	36	33	34	33	27	8	0
250	Year-Round Residence	Non-Participating	572152.87	4748582.63	20	25	23	36	26	22	18	12	0	0	0
251	Year-Round Residence	Non-Participating	571774.89	4748195.40	20	25	23	36	26	23	20	13	0	0	0
252	Year-Round Residence	Non-Participating	572393.50	4748198.39	21	23	22	35	26	23	20	15	3	0	0
253	Year-Round Residence	Non-Participating	569728.11	4749085.84	41	41	40	54	40	35	37	37	34	24	4
254	Year-Round Residence	Non-Participating	572532.80	4748449.56	22	24	22	36	26	23	21	16	5	0	0
255	Year-Round Residence	Non-Participating	570802.37	4752341.85	18	22	20	33	24	21	18	11	0	0	0
256	Year-Round Residence	Non-Participating	572322.77	4748674.34	20	24	23	36	26	22	19	13	1	0	0
257	Year-Round Residence	Non-Participating	572474.99	4748945.70	24	25	24	37	28	25	23	18	10	0	0
258	Public	Participating	568697.55	4748407.61	37	38	36	50	37	31	33	33	30	17	0
259	Year-Round Residence	Non-Participating	572457.84	4748744.73	21	24	23	36	27	23	20	15	4	0	0
260	Unknown	Non-Participating	572537.36	4749013.58	24	25	24	37	28	25	23	18	10	0	0
261	Year-Round Residence	Non-Participating	572277.40	4749489.23	33	36	34	48	33	29	30	30	25	7	0
262	Year-Round Residence	Non-Participating	567291.22	4751402.10	19	24	22	36	24	20	18	13	0	0	0
263	Unknown	Non-Participating	572359.76	4749488.35	29	32	30	43	31	28	27	24	18	0	0
264	Year-Round Residence	Non-Participating	570820.38	4752315.64	18	22	20	33	24	20	17	10	0	0	0
265	Year-Round Residence	Non-Participating	572476.37	4749562.90	26	29	28	41	29	26	25	21	13	0	0
266	Year-Round Residence	Non-Participating	568986.07	4752652.27	20	28	26	40	24	20	18	13	0	0	0
267	Year-Round Residence	Non-Participating	572129.12	4749426.56	36	38	36	50	36	31	33	33	29	16	0
268	Year-Round Residence	Non-Participating	569018.22	4752677.46	20	27	26	40	24	20	18	13	0	0	0
269	Year-Round Residence	Non-Participating	571413.35	4751717.60	23	29	27	41	27	23	22	17	4	0	0
270	Year-Round Residence	Non-Participating	569047.23	4752666.41	20	28	26	40	24	20	18	13	0	0	0
271	Year-Round Residence	Non-Participating	570838.81	4752353.57	18	22	20	33	24	20	17	11	0	0	0
272	Year-Round Residence	Non-Participating	569066.40	4752719.39	20	28	26	40	24	20	19	14	0	0	0
273	Year-Round Residence	Non-Participating	568750.17	4752555.24	18	24	22	36	24	20	17	12	0	0	0
274	Year-Round Residence	Non-Participating	568719.06	4752557.98	18	24	22	36	24	20	17	12	0	0	0
275	Year-Round Residence	Non-Participating	570837.96	4752436.24	18	22	21	34	24	20	17	11	0	0	0
276	Year-Round Residence	Non-Participating	568702.37	4752563.05	18	24	22	36	24	20	17	12	0	0	0
277	Year-Round Residence	Non-Participating	568688.78	4752565.10	18	24	22	36	23	20	17	12	0	0	0
278	Year-Round Residence	Non-Participating	568673.40	4752570.61	18	24	22	36	23	20	17	12	0	0	0
279	Year-Round Residence	Non-Participating	570789.93	4752380.77	18	22	21	34	24	21	18	11	0	0	0
280	Year-Round Residence	Non-Participating	568658.45	4752576.57	18	24	22	36	23	20	17	12	0	0	0
281	Year-Round Residence	Non-Participating	570677.59	4752235.20	20	26	24	38	25	22	19	14	0	0	0
282	Year-Round Residence	Non-Participating	571376.84	4751734.24	23	29	27	41	27	23	22	17	4	0	0

Table E-1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
283	Year-Round Residence	Non-Participating	570687.96	4752247.74	20	25	24	37	25	21	19	13	0	0	0
284	Public	Non-Participating	570704.13	4752040.88	22	28	26	40	26	22	21	16	1	0	0
285	Year-Round Residence	Non-Participating	570701.89	4752256.18	19	22	21	34	25	21	18	12	0	0	0
286	Unknown	Non-Participating	570714.73	4752263.29	19	22	20	34	25	21	18	12	0	0	0
287	Year-Round Residence	Non-Participating	570809.45	4752018.40	22	28	26	40	26	22	21	16	1	0	0
288	Year-Round Residence	Non-Participating	571340.99	4751749.35	23	29	27	41	27	23	22	17	4	0	0
289	Year-Round Residence	Non-Participating	570850.30	4752006.93	22	28	26	40	26	22	21	16	1	0	0
290	Year-Round Residence	Non-Participating	570892.05	4751992.09	22	27	26	39	26	22	21	16	1	0	0
291	Year-Round Residence	Non-Participating	571014.88	4751970.46	22	28	26	40	26	22	21	16	1	0	0
292	Public	Non-Participating	571111.42	4751908.19	22	28	26	40	26	23	21	16	2	0	0
293	Unknown	Non-Participating	571304.34	4751778.21	23	28	27	41	27	23	21	17	3	0	0
294	Year-Round Residence	Non-Participating	571678.99	4751671.07	23	29	27	41	27	23	22	17	4	0	0
295	Year-Round Residence	Non-Participating	571547.10	4751180.35	23	25	23	36	28	24	22	17	7	0	0
296	Year-Round Residence	Non-Participating	572596.07	4750651.28	21	23	21	35	26	22	20	14	2	0	0
297	Year-Round Residence	Non-Participating	568443.92	4750372.68	33	36	35	49	34	30	31	30	24	6	0
298	Year-Round Residence	Non-Participating	568483.01	4750427.62	34	36	35	49	34	30	31	30	25	7	0
299	Year-Round Residence	Non-Participating	566688.38	4749344.81	23	31	29	43	25	21	21	18	3	0	0
300	Year-Round Residence	Non-Participating	566763.25	4749325.90	23	31	29	43	26	21	21	18	4	0	0
301	Year-Round Residence	Non-Participating	567163.35	4748887.86	25	32	31	44	27	23	23	21	10	0	0
302	Year-Round Residence	Non-Participating	567069.27	4748853.77	25	32	30	44	27	22	23	20	9	0	0
303	Public	Non-Participating	567059.75	4748700.62	25	32	30	44	26	22	23	20	9	0	0
304	Year-Round Residence	Non-Participating	566802.31	4748189.24	17	20	19	32	23	19	16	10	0	0	0
305	Year-Round Residence	Non-Participating	566642.20	4748163.67	16	20	18	32	22	18	15	9	0	0	0
306	Year-Round Residence	Non-Participating	566979.42	4747637.85	19	25	24	38	23	19	17	13	0	0	0
307	Year-Round Residence	Non-Participating	567099.23	4747774.79	22	29	28	41	25	20	20	17	4	0	0
308	Year-Round Residence	Non-Participating	567007.48	4747703.39	19	26	24	38	23	19	18	13	0	0	0
309	Year-Round Residence	Non-Participating	567351.84	4747727.92	22	29	27	41	25	21	20	18	7	0	0
310	Unknown	Non-Participating	567421.37	4747741.92	23	28	27	41	25	21	21	18	8	0	0
311	Year-Round Residence	Non-Participating	567709.57	4747729.47	24	29	27	41	26	22	22	20	11	0	0
312	Year-Round Residence	Non-Participating	568056.79	4747559.37	24	28	27	41	26	23	22	20	11	0	0
313	Year-Round Residence	Non-Participating	568143.55	4747492.78	24	28	27	41	26	22	22	20	10	0	0
314	Public	Non-Participating	573576.04	4749828.47	18	23	21	35	23	20	17	11	0	0	0
315	Year-Round Residence	Non-Participating	568602.80	4750580.02	34	36	35	49	34	31	31	31	26	9	0
316	Year-Round Residence	Non-Participating	566729.96	4749483.57	23	31	29	43	25	21	21	18	3	0	0
317	Year-Round Residence	Non-Participating	567279.52	4749013.61	26	32	30	44	27	23	24	21	11	0	0
318	Year-Round Residence	Non-Participating	567234.84	4748990.48	25	32	30	44	27	23	23	21	11	0	0
319	Year-Round Residence	Non-Participating	566706.31	4748690.52	23	31	29	43	25	21	21	17	3	0	0
320	Year-Round Residence	Non-Participating	566847.98	4747795.26	18	24	23	37	23	19	16	11	0	0	0
321	Year-Round Residence	Non-Participating	567019.43	4747556.38	21	29	27	41	24	20	19	15	2	0	0
322	Year-Round Residence	Non-Participating	567170.06	4747588.19	22	29	27	41	24	20	20	16	4	0	0
323	Year-Round Residence	Non-Participating	567591.57	4747854.92	24	29	28	41	26	22	22	20	11	0	0
324	Year-Round Residence	Non-Participating	567724.99	4748032.16	26	30	29	42	27	24	24	22	15	0	0
325	Public	Non-Participating	567924.69	4748484.41	32	34	33	47	32	27	28	28	23	5	0
326	Year-Round Residence	Non-Participating	567832.72	4747643.38	22	27	25	39	25	22	21	18	8	0	0
327	Year-Round Residence	Non-Participating	568602.98	4746920.16	21	26	24	38	24	21	19	15	3	0	0
328	Year-Round Residence	Non-Participating	568602.80	4746806.20	20	25	24	38	24	20	18	15	1	0	0
329	Year-Round Residence	Non-Participating	568733.82	4746784.15	20	25	24	38	24	20	18	14	1	0	0
330	Year-Round Residence	Non-Participating	568379.26	4746530.30	19	26	24	38	23	19	18	14	0	0	0
331	Year-Round Residence	Non-Participating	568649.05	4746694.51	19	25	23	37	24	20	18	14	0	0	0
332	Seasonal Residence	Non-Participating	568665.27	4746559.35	19	25	23	37	23	19	17	13	0	0	0
333	Year-Round Residence	Non-Participating	568658.15	4746482.43	18	24	23	36	23	19	17	12	0	0	0
334	Year-Round Residence	Non-Participating	569416.12	4746629.33	18	21	19	33	23	20	17	10	0	0	0
335	Year-Round Residence	Non-Participating	569383.86	4746504.34	17	21	19	33	23	19	16	10	0	0	0
336	Seasonal Residence	Non-Participating	569777.18	4746578.72	17	21	19	33	23	19	16	9	0	0	0
337	Year-Round Residence	Non-Participating	570085.96	4746487.53	17	21	19	33	23	19	16	9	0	0	0
338	Year-Round Residence	Non-Participating	570214.03	4746605.64	17	21	19	33	23	19	16	10	0	0	0
339	Year-Round Residence	Non-Participating	570502.82	4746733.69	17	21	20	33	23	20	16	10	0	0	0
340	Public	Non-Participating	569982.69	4747395.09	21	24	22	36	26	23	20	15	4	0	0
341	Public	Non-Participating	570636.02	4746880.89	17	21	20	33	23	19	16	10	0	0	0
342	Seasonal Residence	Non-Participating	570631.08	4746914.46	17	21	20	33	23	19	16	10	0	0	0
343	Year-Round Residence	Non-Participating	570677.55	4746933.28	17	21	20	33	23	19	16	10	0	0	0
344	Year-Round Residence	Non-Participating	570748.93	4746980.95	17	21	20	33	23	19	16	9	0	0	0
345	Year-Round Residence	Non-Participating	570882.06	4747052.83	14	20	19	31	21	16	12	4	0	0	0
346	Public	Participating	570231.70	4748743.29	40	41	40	54	40	34	36	36	33	21	0
347	Public	Non-Participating	571142.46	4749860.37	38	40	38	51	39	35	35	34	29	14	0
348	Year-Round Residence	Non-Participating	571902.73	4748867.86	33	36	35	49	34	31	31	29	24	7	0
349	Seasonal Residence	Participating	570990.46	4750073.71	40	42	40	53	42	36	37	36	32	21	0
350	Year-Round Residence	Non-Participating	570483.09	4750708.69	31	32	31	44	33	30	29	26	19	0	0
351	Year-Round Residence	Non-Participating	569936.19	4750675.83	34	33	32	45	35	33	32	29	25	12	0
352	Public	Non-Participating	569906.93	4751111.13	27	28	26	40	31	28	26	22	14	0	0
353	Year-Round Residence	Non-Participating	572130.00	4749927.83	28	30	29	41	31	28	27	24	16	0	0
354	Year-Round Residence	Non-Participating	572347.74	4749587.53	28	30	28	41	30	27	26	23	16	0	0
355	Year-Round Residence	Non-Participating	572388.99	4749601.27	27	30	28	41	30	27	26	22	15	0	0
356	Year-Round Residence	Non-Participating	572377.93	4749674.04	28	31	30	43	30	27	27	24	17	0	0
357	Year-Round Residence	Non-Participating	572403.52	4749657.29	27	30	28	41	30	27	26	22	14	0	0
358	Year-Round Residence	Non-Participating	572449.88	4749684.62	27	31	29	43	30	27	26	23	15	0	0
359	Year-Round Residence	Non-Participating	572422.83	4749715.98	28	31	30	43	30	27	26	23	15	0	0
360	Year-Round Residence	Non-Participating	572774.46	4749767.27	22	24	22	36	27	24	21	17	7	0	0
361	Year-Round Residence	Non-Participating	572717.98	4749764.92	23	24	23	36	27	24	22	17	8	0	0
362	Year-Round Residence	Non-Participating	572682.80	4749798.81	23	24	23	36	27	24	22	17	8	0	0
363	Year-Round Residence	Non-Participating	572762.62	4749789.18	22	24	22	36	27	24	21	17	7	0	0
364	Year-Round Residence	Non-Participating	572791.18	4749801.92	22	24	22	36	27	23	21	16	6	0	0
365	Year-Round Residence	Non-Participating	572751.22	4749831.40	23	25	23	37	27	24	22	17	7	0	0
366	Year-Round Residence	Non-Participating	572816.05	4749852.16	22	25	23	37	26	23	21	16	6	0	0
367	Year-Round Residence	Non-Participating	572803.74	4749814.71	22	24	22	36	26	23	21	16	6	0	0
368	Year-Round Residence	Non-Participating	572719.20	4749814.91	23	24	23	36	27	24	22	17	7	0	0
369	Year-Round Residence	Non-Participating	572700.86	4749809.70	23	24	23	36	27	24	22	17	8	0	0
370	Year-Round Residence	Non-Participating	572772.84	4749837.95	22	25	23	37	27	24	21	17	6	0	0
371	Year-Round Residence	Non-Participating	572843.77	4749757.31	22	24	22	36	26	23	21	16	6	0	0
372	Year-Round Residence	Non-Participating	572858.24	4749756.37	22	23	22	35	26	23	21	16	6	0	0
373	Year-Round Residence	Non-Participating	572872.27	4749754.77	22	23	22	35	26	23	21	16	5	0	0
374	Year-Round Residence	Non-Participating	572886.74	4749753.40	21	23	22	35	26	23	21	16	5	0	0
375	Year-Round Residence	Non-Participating	572911.71	4749774.18	21	23	22	35	26	23	20	15	5	0	0
376	Year-Round Residence	Non-Participating	572905.99	4749797.03	21	23	22	35	26	23	21	15	5	0	0

Table E-1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
377	Year-Round Residence	Non-Participating	572906.50	4749811.44	22	24	23	36	26	23	21	16	5	0	0
378	Year-Round Residence	Non-Participating	572904.14	4749826.69	22	24	23	36	26	23	21	16	5	0	0
379	Year-Round Residence	Non-Participating	572909.71	4749859.26	21	24	23	36	26	23	21	16	5	0	0
380	Year-Round Residence	Non-Participating	572900.61	4749664.73	21	23	22	35	26	23	21	15	5	0	0
381	Year-Round Residence	Non-Participating	572878.71	4749643.76	22	23	22	35	26	23	21	16	6	0	0
382	Year-Round Residence	Non-Participating	572834.22	4749666.64	22	24	22	36	26	23	21	16	6	0	0
383	Public	Non-Participating	572739.37	4749725.08	23	24	22	36	27	24	22	17	7	0	0
384	Year-Round Residence	Non-Participating	572913.11	4749843.02	21	24	23	36	26	23	21	16	5	0	0
385	Public	Non-Participating	567635.09	4747727.54	24	29	27	41	26	22	22	19	10	0	0
386	Seasonal Residence	Non-Participating	566901.78	4748735.92	24	31	29	43	26	22	22	19	6	0	0
387	Year-Round Residence	Non-Participating	567027.75	4749137.63	25	32	30	44	27	22	23	20	8	0	0
388	Year-Round Residence	Non-Participating	566845.68	4749079.73	24	31	29	43	26	22	22	19	5	0	0
389	Public	Non-Participating	566757.05	4749026.28	23	31	29	43	25	21	21	18	4	0	0

1. Addresses stipulation (e) (1).

Table E-1.1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
13	Year-Round Residence	Participating	569470.27	4750326.39	44	45	43	57	43	38	39	40	37	26	5
84	Unknown	Participating	569760.25	4749026.80	43	43	41	55	43	37	39	39	37	29	14
108	Public	Participating	571050.00	4749359.91	42	43	41	55	42	36	38	38	35	24	0
81	Year-Round Residence	Non-Participating	571701.79	4749407.25	42	42	40	54	41	36	37	38	35	24	2
219	Unknown	Non-Participating	570843.09	4750478.54	42	43	41	53	45	38	39	37	34	24	3
50	Year-Round Residence	Non-Participating	571277.88	4749688.74	41	41	39	53	41	38	38	37	34	24	8
154	Unknown	Non-Participating	569564.70	4748956.73	41	42	40	54	40	35	37	37	34	23	0
145	Year-Round Residence	Non-Participating	571349.13	4749789.94	41	41	39	53	41	38	38	36	33	22	5
253	Year-Round Residence	Non-Participating	569728.11	4749085.84	41	41	40	54	40	35	37	37	34	24	4
32	Year-Round Residence	Non-Participating	569446.59	4748766.97	41	42	40	54	40	35	36	37	34	23	3
41	Year-Round Residence	Non-Participating	569669.89	4749038.11	40	41	40	54	40	35	37	36	33	23	3
12	Year-Round Residence	Non-Participating	569524.01	4750447.60	40	41	39	53	40	36	37	36	33	21	0
102	Public	Participating	570176.10	4748800.96	40	42	40	54	40	34	36	36	33	21	0
206	Year-Round Residence	Non-Participating	569803.88	4749130.26	40	41	39	53	40	35	36	36	33	23	2
346	Public	Participating	570231.70	4748743.29	40	41	40	54	40	34	36	36	33	21	0
349	Seasonal Residence	Participating	570990.46	4750073.71	40	42	40	53	42	36	37	36	32	21	0
88	Year-Round Residence	Non-Participating	569631.58	4749014.15	40	41	39	53	40	35	36	36	33	22	0
136	Year-Round Residence	Non-Participating	570761.86	4750201.02	40	41	40	52	42	36	37	35	31	20	0
52	Year-Round Residence	Non-Participating	571154.45	4749594.94	40	40	38	52	40	36	36	35	32	21	0
28	Year-Round Residence	Non-Participating	569441.95	4748878.66	40	41	40	53	39	34	36	36	32	20	0
109	Year-Round Residence	Non-Participating	570804.68	4750125.53	39	41	40	52	42	36	37	35	31	19	0
138	Year-Round Residence	Non-Participating	571317.50	4750220.80	39	41	40	53	40	34	36	35	32	19	0
33	Unknown	Participating	571797.79	4749526.97	39	40	39	52	39	34	35	35	32	19	0
195	Year-Round Residence	Non-Participating	571253.37	4750153.80	39	41	39	52	41	35	36	35	31	19	0
127	Public	Non-Participating	569386.40	4748827.47	39	41	39	53	39	34	35	35	31	19	0
89	Year-Round Residence	Non-Participating	569415.06	4748678.47	39	40	38	52	39	34	35	35	32	21	0
140	Year-Round Residence	Non-Participating	570699.66	4750286.79	39	41	39	51	42	35	37	34	30	19	0
139	Year-Round Residence	Non-Participating	571168.68	4750042.07	39	40	39	52	40	35	36	35	30	17	0
143	Year-Round Residence	Non-Participating	571206.87	4749823.38	39	40	38	52	39	36	36	34	30	17	0
29	Year-Round Residence	Non-Participating	572033.45	4749443.89	38	39	38	52	38	33	34	34	31	19	0
141	Year-Round Residence	Non-Participating	571140.33	4749988.53	38	40	39	51	40	35	36	34	30	16	0
146	Year-Round Residence	Non-Participating	570965.96	4749992.84	38	40	39	51	40	35	36	34	30	16	0
152	Year-Round Residence	Participating	569899.10	4749419.76	38	40	38	52	38	34	35	34	30	15	0
243	Year-Round Residence	Non-Participating	570876.81	4750015.49	38	40	39	51	40	35	36	34	30	16	0
27	Year-Round Residence	Non-Participating	572084.90	4749382.45	38	39	38	52	38	32	34	34	31	19	0
105	Public	Non-Participating	570370.25	4748493.89	38	39	37	51	38	33	34	34	31	19	0
190	Year-Round Residence	Non-Participating	571232.55	4750542.16	38	40	38	51	40	34	35	34	30	17	0
347	Public	Non-Participating	571142.46	4749860.37	38	40	38	51	39	35	35	34	29	14	0
34	Year-Round Residence	Non-Participating	571947.48	4749538.14	38	39	38	51	38	33	34	34	30	17	0
148	Year-Round Residence	Non-Participating	571002.35	4749946.95	38	40	38	51	39	34	35	34	29	14	0
142	Year-Round Residence	Non-Participating	571087.93	4749888.48	37	39	38	51	39	34	35	33	29	13	0
258	Public	Participating	568697.55	4748407.61	37	38	36	50	37	31	33	33	30	17	0
36	Year-Round Residence	Non-Participating	572064.46	4749493.97	37	38	37	51	37	32	33	33	29	16	0
37	Year-Round Residence	Non-Participating	570876.79	4749847.02	37	39	38	51	38	33	34	33	28	9	0
144	Public	Participating	570354.70	4750012.67	37	38	37	50	37	33	34	33	29	15	0
151	Year-Round Residence	Non-Participating	570295.34	4749481.41	37	39	38	52	36	33	34	33	28	9	0
38	Year-Round Residence	Non-Participating	570986.36	4749841.17	37	39	37	50	38	34	34	32	28	11	0
203	Year-Round Residence	Non-Participating	570325.87	4749494.82	37	39	38	52	36	33	34	33	28	9	0
40	Year-Round Residence	Non-Participating	570421.97	4749520.25	36	39	38	52	36	32	33	33	27	8	0
197	Seasonal Residence	Participating	571131.83	4750132.46	36	37	35	48	38	35	35	32	28	16	0
247	Year-Round Residence	Non-Participating	569293.04	4748701.69	36	39	37	51	36	32	33	33	28	14	0
249	Year-Round Residence	Non-Participating	570373.87	4749512.77	36	39	38	52	36	33	34	33	27	8	0
86	Year-Round Residence	Non-Participating	570457.76	4749533.71	36	39	38	52	36	32	33	33	27	8	0
267	Year-Round Residence	Non-Participating	572129.12	4749426.56	36	38	36	50	36	31	33	33	29	16	0
115	Year-Round Residence	Non-Participating	568520.71	4749125.93	36	38	37	51	36	31	33	33	29	14	0
217	Public	Participating	570554.00	4750310.61	36	39	37	49	38	33	34	32	26	11	0
113	Year-Round Residence	Non-Participating	568448.25	4749188.07	36	39	37	51	35	31	32	32	27	11	0
245	Year-Round Residence	Non-Participating	570611.42	4749669.71	36	38	37	51	36	32	33	32	26	5	0
112	Year-Round Residence	Non-Participating	568490.94	4749300.23	35	39	37	51	35	31	32	32	26	6	0
201	Year-Round Residence	Non-Participating	570673.93	4749725.35	35	38	36	50	36	32	33	31	26	4	0
83	Year-Round Residence	Non-Participating	570739.32	4749840.37	35	38	36	50	36	32	33	31	25	3	0
110	Year-Round Residence	Non-Participating	568509.97	4749412.15	35	39	37	51	35	31	32	32	26	4	0
14	Year-Round Residence	Non-Participating	569440.20	4750949.47	35	37	35	49	35	32	32	31	26	11	0
150	Year-Round Residence	Non-Participating	570747.24	4749752.29	35	37	35	49	36	32	32	31	25	5	0
85	Year-Round Residence	Non-Participating	570902.01	4749780.07	35	36	34	48	36	33	32	31	26	7	0
213	Year-Round Residence	Non-Participating	569004.26	4748579.18	35	36	34	48	35	31	31	31	27	12	0
199	Unknown	Non-Participating	569257.69	4748905.61	35	38	36	50	35	32	32	31	25	5	0
315	Year-Round Residence	Non-Participating	568602.80	4750580.02	34	36	35	49	34	31	31	31	26	9	0
158	Year-Round Residence	Non-Participating	568312.30	4750143.06	34	38	37	50	34	30	31	30	24	2	0
351	Year-Round Residence	Non-Participating	569936.19	4750675.83	34	33	32	45	35	33	32	29	25	12	0
31	Year-Round Residence	Non-Participating	572177.45	4749579.83	34	37	35	49	34	30	31	30	25	8	0
107	Year-Round Residence	Non-Participating	568324.87	4749349.20	34	38	36	50	34	30	31	30	24	3	0
298	Year-Round Residence	Non-Participating	568483.01	4750427.62	34	36	35	49	34	30	31	30	25	7	0
30	Unknown	Non-Participating	568264.94	4750086.08	34	38	36	50	33	29	31	30	23	0	0
156	Year-Round Residence	Non-Participating	568273.23	4750195.92	34	38	36	50	33	29	31	30	23	0	0
348	Year-Round Residence	Non-Participating	571902.73	4748867.86	33	36	35	49	34	31	31	29	24	7	0
103	Year-Round Residence	Non-Participating	568269.88	4749416.75	33	37	36	50	33	29	31	30	23	0	0
297	Year-Round Residence	Non-Participating	568443.92	4750372.68	33	36	35	49	34	30	31	30	24	6	0
224	Unknown	Non-Participating	568375.18	4750338.33	33	37	36	49	33	30	31	30	23	3	0
261	Year-Round Residence	Non-Participating	572277.40	4749489.23	33	36	34	48	33	29	30	30	25	7	0
131	Year-Round Residence	Non-Participating	569204.55	4748614.37	33	35	33	47	34	31	31	29	24	5	0
211	Year-Round Residence	Non-Participating	569091.23	4748469.17	33	34	33	47	33	30	30	29	24	6	0
99	Public	Non-Participating	568171.18	4749475.13	32	37	35	49	32	29	30	29	22	0	0
87	Year-Round Residence	Non-Participating	568144.54	4749953.20	32	37	35	49	32	28	30	29	21	0	0
135	Year-Round Residence	Non-Participating	572163.98	4749694.57	32	35	34	47	33	29	30	29	23	1	0
153	Year-Round Residence	Non-Participating	568569.87	4750842.99	32	35	33	47	32	29	29	28	23	2	0
106	Public	Non-Participating	570443.52	4748526.07	32	32	31	44	33	31	30	27	23	8	0
137	Unknown	Non-Participating	572108.67	4749706.21	32	35	33	47	33	30	30	28	22	1	0
325	Public	Non-Participating	567924.69	4748484.41	32	34	33	47	32	27	28	28	23	5	0
149	Year-Round Residence	Non-Participating	568587.91	4750965.35	32	35	34	47	32	28	29	28	22	0	0
221	Year-Round Residence	Non-Participating	570539.58	4750606.34	32	33	32	45	34	31	30	27	20	0	0
104	Year-Round Residence	Non-Participating	570501.36	4748524.92	31	32	30	44	33	30	29	27	21	5	0
222	Year-Round Residence	Non-Participating	570500.38	4750670.52	31	33	31	45	34	31	30	26	19	0	0
90	Year-Round Residence	Non-Participating	569428.11	4747994.95	31	34	32	46	31	28	28	27	21	0	0

Table E-1.1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
350	Year-Round Residence	Non-Participating	570483.09	4750708.69	31	32	31	44	33	30	29	26	19	0	0
91	Year-Round Residence	Non-Participating	568048.14	4749868.45	31	35	34	48	31	28	28	27	19	0	0
207	Year-Round Residence	Non-Participating	569146.41	4748470.60	31	32	30	44	32	30	29	26	21	0	0
216	Year-Round Residence	Non-Participating	567898.40	4749374.66	30	35	33	47	31	27	28	27	19	0	0
209	Year-Round Residence	Non-Participating	567872.58	4749460.82	30	35	34	47	30	27	28	26	18	0	0
220	Year-Round Residence	Non-Participating	567915.86	4749336.42	30	34	33	47	31	27	28	26	19	0	0
223	Year-Round Residence	Non-Participating	567944.57	4749268.18	30	34	32	46	31	27	27	26	20	0	0
230	Public	Non-Participating	567865.85	4748367.78	30	33	32	46	30	26	27	26	21	0	0
42	Year-Round Residence	Non-Participating	567888.53	4749797.92	30	35	34	47	30	27	28	26	17	0	0
35	Year-Round Residence	Non-Participating	569111.71	4748348.90	30	31	29	43	31	29	28	26	20	0	0
100	Public	Non-Participating	569612.16	4747904.70	30	32	31	45	31	27	27	26	20	0	0
132	Year-Round Residence	Non-Participating	572071.13	4749860.32	30	32	30	43	32	29	28	25	18	0	0
163	Year-Round Residence	Non-Participating	567887.61	4748293.78	30	33	31	45	30	26	27	26	20	0	0
165	Year-Round Residence	Non-Participating	567854.41	4750001.63	30	35	34	47	30	26	27	26	17	0	0
47	Year-Round Residence	Non-Participating	567865.22	4749673.74	29	35	33	47	30	27	27	26	17	0	0
134	Year-Round Residence	Non-Participating	567898.75	4749472.43	29	34	33	46	30	27	27	26	18	0	0
164	Year-Round Residence	Non-Participating	567829.18	4750072.95	29	35	33	47	30	26	27	25	16	0	0
225	Year-Round Residence	Non-Participating	567779.76	4749367.81	29	34	33	47	30	26	27	26	17	0	0
167	Year-Round Residence	Non-Participating	567793.49	4749961.75	29	35	33	47	30	26	27	25	16	0	0
226	Year-Round Residence	Non-Participating	567703.11	4749411.58	29	34	33	47	30	26	27	25	16	0	0
133	Year-Round Residence	Non-Participating	572150.30	4749829.72	29	31	30	42	31	28	28	24	17	0	0
147	Year-Round Residence	Non-Participating	567692.70	4749312.40	29	34	32	46	29	26	27	25	16	0	0
168	Year-Round Residence	Non-Participating	567758.90	4750004.18	29	35	33	47	30	26	27	25	15	0	0
263	Unknown	Non-Participating	572359.76	4749488.35	29	32	30	43	31	28	27	24	18	0	0
169	Year-Round Residence	Non-Participating	567731.07	4750072.42	29	35	33	47	29	26	26	25	15	0	0
26	Year-Round Residence	Non-Participating	572327.57	4749300.33	28	30	29	42	31	28	27	24	18	0	0
356	Year-Round Residence	Non-Participating	572377.93	4749674.04	28	31	30	43	30	27	27	24	17	0	0
157	Year-Round Residence	Non-Participating	567640.59	4749265.62	28	34	32	46	29	25	26	24	16	0	0
353	Year-Round Residence	Non-Participating	572130.00	4749927.83	28	30	29	41	31	28	27	24	16	0	0
193	Public	Non-Participating	567744.91	4750167.70	28	34	33	46	29	26	26	24	14	0	0
159	Year-Round Residence	Non-Participating	567594.38	4749243.34	28	33	32	46	29	25	26	24	15	0	0
93	Year-Round Residence	Non-Participating	569022.44	4748078.18	28	30	28	42	30	27	26	23	17	0	0
354	Year-Round Residence	Non-Participating	572347.74	4749587.53	28	30	28	41	30	27	26	23	16	0	0
231	Year-Round Residence	Non-Participating	567605.57	4750119.19	28	34	32	46	29	25	26	24	13	0	0
161	Year-Round Residence	Non-Participating	567558.69	4749219.42	28	33	31	45	29	25	25	24	15	0	0
171	Year-Round Residence	Non-Participating	567585.78	4750216.32	28	34	32	46	29	25	26	23	12	0	0
359	Year-Round Residence	Non-Participating	572422.83	4749715.98	28	31	30	43	30	27	26	23	15	0	0
39	Year-Round Residence	Non-Participating	568959.03	4748022.54	27	30	28	42	29	27	26	23	16	0	0
358	Year-Round Residence	Non-Participating	572449.88	4749684.62	27	31	29	43	30	27	26	23	15	0	0
1	Year-Round Residence	Non-Participating	569876.41	4751052.94	27	28	27	40	31	28	26	22	14	0	0
355	Year-Round Residence	Non-Participating	572388.99	4749601.27	27	30	28	41	30	27	26	22	15	0	0
215	Year-Round Residence	Non-Participating	570837.62	4748244.37	27	30	28	42	30	27	25	22	15	0	0
352	Public	Non-Participating	569906.93	4751111.13	27	28	26	40	31	28	26	22	14	0	0
95	Year-Round Residence	Non-Participating	568728.69	4747747.82	27	30	29	43	28	25	25	23	16	0	0
357	Year-Round Residence	Non-Participating	572403.52	4749657.29	27	30	28	41	30	27	26	22	14	0	0
98	Public	Non-Participating	569590.18	4747825.90	27	29	28	41	29	26	25	22	14	0	0
227	Year-Round Residence	Non-Participating	567437.83	4749126.57	27	32	31	44	28	24	24	22	13	0	0
265	Year-Round Residence	Non-Participating	572476.37	4749562.90	26	29	28	41	29	26	25	21	13	0	0
96	Year-Round Residence	Non-Participating	568585.66	4747680.03	26	30	28	42	28	24	24	22	15	0	0
228	Year-Round Residence	Non-Participating	567395.20	4749095.60	26	32	30	44	28	24	24	22	13	0	0
324	Year-Round Residence	Non-Participating	567724.99	4748032.16	26	30	29	42	27	24	24	22	15	0	0
94	Year-Round Residence	Non-Participating	568051.46	4749798.66	26	26	25	38	29	27	25	21	12	0	0
317	Year-Round Residence	Non-Participating	567279.52	4749013.61	26	32	30	44	27	23	24	21	11	0	0
301	Year-Round Residence	Non-Participating	567163.35	4748887.86	25	32	31	44	27	23	23	21	10	0	0
214	Year-Round Residence	Non-Participating	570873.11	4748201.08	25	27	25	39	29	26	24	20	11	0	0
318	Year-Round Residence	Non-Participating	567234.84	4748990.48	25	32	30	44	27	23	23	21	11	0	0
302	Year-Round Residence	Non-Participating	567069.27	4748853.77	25	32	30	44	27	22	23	20	9	0	0
233	Public	Non-Participating	567334.37	4750574.31	25	32	30	44	27	23	23	20	7	0	0
387	Year-Round Residence	Non-Participating	567027.75	4749137.63	25	32	30	44	27	22	23	20	8	0	0
303	Public	Non-Participating	567059.75	4748700.62	25	32	30	44	26	22	23	20	9	0	0
17	Year-Round Residence	Non-Participating	569616.81	4751281.68	24	27	25	39	29	26	24	18	9	0	0
3	Unknown	Non-Participating	568943.15	4751628.92	24	27	26	39	28	25	23	19	10	0	0
234	Year-Round Residence	Non-Participating	567305.82	4750627.27	24	32	30	44	27	23	23	19	6	0	0
82	Year-Round Residence	Non-Participating	572571.58	4749673.02	24	25	23	37	28	25	23	19	10	0	0
260	Unknown	Non-Participating	572537.36	4749013.58	24	25	24	37	28	25	23	18	10	0	0
312	Year-Round Residence	Non-Participating	568056.79	4747559.37	24	28	27	41	26	23	22	20	11	0	0
323	Year-Round Residence	Non-Participating	567591.57	4747854.92	24	29	28	41	26	22	22	20	11	0	0
16	Year-Round Residence	Non-Participating	569637.22	4751255.05	24	27	25	38	29	26	23	18	8	0	0
257	Year-Round Residence	Non-Participating	572474.99	4748945.70	24	25	24	37	28	25	23	18	10	0	0
15	Year-Round Residence	Non-Participating	569657.94	4751219.48	24	27	25	39	29	26	23	17	8	0	0
191	Year-Round Residence	Non-Participating	571608.56	4750951.03	24	26	24	37	29	25	23	18	8	0	0
311	Year-Round Residence	Non-Participating	567709.57	4747729.47	24	29	27	41	26	22	22	20	11	0	0
313	Year-Round Residence	Non-Participating	568143.55	4747492.78	24	28	27	41	26	22	22	20	10	0	0
59	Year-Round Residence	Non-Participating	572321.59	4751532.72	24	31	29	43	27	22	22	18	4	0	0
386	Seasonal Residence	Non-Participating	566901.78	4748735.92	24	31	29	43	26	22	22	19	6	0	0
385	Public	Non-Participating	567635.09	4747727.54	24	29	27	41	26	22	22	19	10	0	0
388	Year-Round Residence	Non-Participating	566845.68	4749079.73	24	31	29	43	26	22	22	19	5	0	0
75	Year-Round Residence	Non-Participating	572032.87	4751754.39	23	31	29	42	27	22	22	18	4	0	0
78	Unknown	Non-Participating	571987.72	4751800.17	23	31	29	42	27	22	22	18	4	0	0
300	Year-Round Residence	Non-Participating	566763.25	4749325.90	23	31	29	43	26	21	21	18	4	0	0
295	Year-Round Residence	Non-Participating	571547.10	4751180.35	23	25	23	36	28	24	22	17	7	0	0
389	Public	Non-Participating	566757.05	4749026.28	23	31	29	43	25	21	21	18	4	0	0
269	Year-Round Residence	Non-Participating	571413.35	4751717.60	23	29	27	41	27	23	22	17	4	0	0
316	Year-Round Residence	Non-Participating	566729.96	4749483.57	23	31	29	43	25	21	21	18	3	0	0
362	Year-Round Residence	Non-Participating	572682.80	4749798.81	23	24	23	36	27	24	22	17	8	0	0
282	Year-Round Residence	Non-Participating	571376.84	4751734.24	23	29	27	41	27	23	22	17	4	0	0
288	Year-Round Residence	Non-Participating	571340.99	4751749.35	23	29	27	41	27	23	22	17	4	0	0
294	Year-Round Residence	Non-Participating	571678.99	4751671.07	23	29	27	41	27	23	22	17	4	0	0
299	Year-Round Residence	Non-Participating	566688.38	4749344.81	23	31	29	43	25	21	21	18	3	0	0
293	Unknown	Non-Participating	571304.34	4751778.21	23	28	27	41	27	23	21	17	3	0	0
369	Year-Round Residence	Non-Participating	572700.86	4749809.70	23	24	23	36	27	24	22	17	8	0	0
361	Year-Round Residence	Non-Participating	572717.98	4749764.92	23	24	23	36	27	24	22	17	8	0	0
368	Year-Round Residence	Non-Participating	572719.20	4749814.91	23	24	23	36	27	24	22	17	7	0	0
310	Unknown	Non-Participating	567421.37	4747741.92	23	28	27	41	25	21	21	18	8	0	0

Table E-1.1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
319	Year-Round Residence	Non-Participating	566706.31	4748690.52	23	31	29	43	25	21	21	17	3	0	0
365	Year-Round Residence	Non-Participating	572751.22	4749831.40	23	25	23	37	27	24	22	17	7	0	0
383	Public	Non-Participating	572739.37	4749725.08	23	24	22	36	27	24	22	17	7	0	0
23	Year-Round Residence	Non-Participating	571711.42	4750985.73	22	25	23	36	28	24	22	16	4	0	0
125	Year-Round Residence	Non-Participating	572739.97	4749821.10	22	24	22	36	27	24	22	17	7	0	0
24	Unknown	Non-Participating	571751.21	4750950.58	22	25	23	36	28	24	22	16	4	0	0
309	Year-Round Residence	Non-Participating	567351.84	4747727.92	22	29	27	41	25	21	20	18	7	0	0
363	Year-Round Residence	Non-Participating	572762.62	4749789.18	22	24	22	36	27	24	21	17	7	0	0
370	Year-Round Residence	Non-Participating	572772.84	4749837.95	22	25	23	37	27	24	21	17	6	0	0
292	Public	Non-Participating	571111.42	4751908.19	22	28	26	40	26	23	21	16	2	0	0
326	Year-Round Residence	Non-Participating	567832.72	4747643.38	22	27	25	39	25	22	21	18	8	0	0
360	Year-Round Residence	Non-Participating	572774.46	4749767.27	22	24	22	36	27	24	21	17	7	0	0
6	Year-Round Residence	Non-Participating	571504.09	4751087.43	22	25	23	36	28	24	21	16	5	0	0
18	Year-Round Residence	Non-Participating	569001.55	4751753.69	22	24	22	36	27	24	21	16	6	0	0
364	Year-Round Residence	Non-Participating	572791.18	4749801.92	22	24	22	36	27	23	21	16	6	0	0
366	Year-Round Residence	Non-Participating	572816.05	4749852.16	22	25	23	37	26	23	21	16	6	0	0
77	Year-Round Residence	Non-Participating	570980.50	4751971.19	22	28	26	40	26	23	21	16	1	0	0
367	Year-Round Residence	Non-Participating	572803.74	4749814.71	22	24	22	36	26	23	21	16	6	0	0
64	Year-Round Residence	Non-Participating	570913.76	4751988.61	22	28	26	40	26	23	21	16	1	0	0
71	Year-Round Residence	Non-Participating	570930.65	4751985.07	22	28	26	40	26	23	21	16	1	0	0
76	Year-Round Residence	Non-Participating	570962.92	4751977.55	22	28	26	40	26	22	21	16	1	0	0
289	Year-Round Residence	Non-Participating	570850.30	4752006.93	22	28	26	40	26	22	21	16	1	0	0
291	Year-Round Residence	Non-Participating	571014.88	4751970.46	22	28	26	40	26	22	21	16	1	0	0
284	Public	Non-Participating	570704.13	4752040.88	22	28	26	40	26	22	21	16	1	0	0
287	Year-Round Residence	Non-Participating	570809.45	4752018.40	22	28	26	40	26	22	21	16	1	0	0
290	Year-Round Residence	Non-Participating	570892.05	4751992.09	22	27	26	39	26	22	21	16	1	0	0
307	Year-Round Residence	Non-Participating	567099.23	4747774.79	22	29	28	41	25	20	20	17	4	0	0
382	Year-Round Residence	Non-Participating	572834.22	4749666.64	22	24	22	36	26	23	21	16	6	0	0
7	Year-Round Residence	Non-Participating	572330.47	4750641.72	22	24	22	36	27	23	21	16	5	0	0
49	Year-Round Residence	Non-Participating	568639.14	4747589.76	22	24	22	36	26	23	21	16	6	0	0
371	Year-Round Residence	Non-Participating	572843.77	4749757.31	22	24	22	36	26	23	21	16	6	0	0
372	Year-Round Residence	Non-Participating	572858.24	4749756.37	22	23	22	35	26	23	21	16	6	0	0
22	Year-Round Residence	Non-Participating	571684.32	4751002.03	22	25	23	36	27	24	21	15	3	0	0
48	Year-Round Residence	Non-Participating	568591.16	4747567.45	22	23	22	36	26	23	21	16	6	0	0
254	Year-Round Residence	Non-Participating	572532.80	4748449.56	22	24	22	36	26	23	21	16	5	0	0
322	Year-Round Residence	Non-Participating	567170.06	4747588.19	22	29	27	41	24	20	20	16	4	0	0
373	Year-Round Residence	Non-Participating	572872.27	4749754.77	22	23	22	35	26	23	21	16	5	0	0
377	Year-Round Residence	Non-Participating	572906.50	4749811.44	22	24	23	36	26	23	21	16	5	0	0
378	Year-Round Residence	Non-Participating	572904.14	4749826.69	22	24	23	36	26	23	21	16	5	0	0
381	Year-Round Residence	Non-Participating	572878.71	4749643.76	22	23	22	35	26	23	21	16	6	0	0
46	Year-Round Residence	Non-Participating	568550.20	4747544.78	21	23	22	35	26	23	20	16	6	0	0
126	Year-Round Residence	Non-Participating	572899.93	4749689.24	21	23	22	35	26	23	21	15	5	0	0
182	Year-Round Residence	Non-Participating	570648.56	4752117.38	21	27	26	39	26	22	20	15	0	0	0
374	Year-Round Residence	Non-Participating	572886.74	4749753.40	21	23	22	35	26	23	21	16	5	0	0
379	Year-Round Residence	Non-Participating	572909.71	4749859.26	21	24	23	36	26	23	21	16	5	0	0
380	Year-Round Residence	Non-Participating	572900.61	4749664.73	21	23	22	35	26	23	21	15	5	0	0
384	Year-Round Residence	Non-Participating	572913.11	4749843.02	21	24	23	36	26	23	21	16	5	0	0
97	Year-Round Residence	Non-Participating	568389.52	4747575.92	21	23	22	35	26	23	20	16	6	0	0
180	Year-Round Residence	Non-Participating	570631.53	4752070.08	21	27	25	39	26	22	20	15	0	0	0
375	Year-Round Residence	Non-Participating	572911.71	4749774.18	21	23	22	35	26	23	20	15	5	0	0
376	Year-Round Residence	Non-Participating	572905.99	4749797.03	21	23	22	35	26	23	21	15	5	0	0
44	Year-Round Residence	Non-Participating	568489.11	4747519.28	21	23	22	35	26	23	20	15	5	0	0
181	Public	Non-Participating	570640.26	4752158.08	21	27	26	39	26	22	20	15	0	0	0
259	Year-Round Residence	Non-Participating	572457.84	4748744.73	21	24	23	36	27	23	20	15	4	0	0
179	Public	Non-Participating	570594.72	4752115.73	21	27	25	39	26	22	20	15	0	0	0
185	Year-Round Residence	Non-Participating	570640.73	4752176.63	21	27	26	39	26	22	20	15	0	0	0
238	Year-Round Residence	Non-Participating	570649.57	4752189.59	21	27	26	39	26	22	20	15	0	0	0
114	Public	Non-Participating	572056.82	4750775.08	21	24	23	36	27	23	20	14	3	0	0
175	Public	Non-Participating	570590.39	4752068.13	21	26	24	38	26	22	20	15	0	0	0
188	Year-Round Residence	Non-Participating	570657.92	4752210.57	21	27	25	39	26	22	20	15	0	0	0
192	Public	Non-Participating	568362.74	4751682.34	21	23	21	35	26	23	20	15	4	0	0
239	Year-Round Residence	Non-Participating	570654.28	4752199.89	21	27	25	39	26	22	20	15	0	0	0
176	Year-Round Residence	Non-Participating	569810.04	4752510.27	21	28	27	40	25	21	20	14	0	0	0
178	Year-Round Residence	Non-Participating	570469.61	4752147.17	21	26	24	38	26	22	20	14	0	0	0
252	Year-Round Residence	Non-Participating	572393.50	4748198.39	21	23	22	35	26	23	20	15	3	0	0
20	Year-Round Residence	Non-Participating	568968.94	4751687.04	21	24	22	36	26	23	20	14	2	0	0
183	Year-Round Residence	Non-Participating	570664.18	4752131.94	21	26	25	38	26	22	20	14	0	0	0
248	Year-Round Residence	Non-Participating	571541.55	4748220.90	21	25	23	36	26	23	20	14	2	0	0
340	Public	Non-Participating	569982.69	4747395.09	21	24	22	36	26	23	20	15	4	0	0
184	Year-Round Residence	Non-Participating	570672.98	4752148.82	21	26	25	38	26	22	20	14	0	0	0
321	Year-Round Residence	Non-Participating	567019.43	4747556.38	21	29	27	41	24	20	19	15	2	0	0
160	Year-Round Residence	Non-Participating	569844.91	4752385.69	21	27	26	39	25	22	19	14	0	0	0
172	Year-Round Residence	Non-Participating	569879.13	4752379.87	21	27	26	39	25	22	20	14	0	0	0
186	Year-Round Residence	Non-Participating	570677.42	4752164.58	21	26	24	38	26	22	20	14	0	0	0
237	Public	Non-Participating	570159.50	4751921.17	21	23	22	35	26	23	20	14	0	0	0
296	Year-Round Residence	Non-Participating	572596.07	4750651.28	21	23	21	35	26	22	20	14	2	0	0
128	Year-Round Residence	Non-Participating	573037.69	4749750.94	21	23	21	35	25	22	20	14	3	0	0
240	Year-Round Residence	Non-Participating	570687.51	4752185.79	21	26	24	38	25	22	20	14	0	0	0
327	Year-Round Residence	Non-Participating	568602.98	4746920.16	21	26	24	38	24	21	19	15	3	0	0
19	Year-Round Residence	Non-Participating	568953.46	4751703.03	20	24	22	36	26	23	20	14	1	0	0
189	Year-Round Residence	Non-Participating	570668.98	4752220.50	20	26	24	38	25	22	19	14	0	0	0
212	Year-Round Residence	Non-Participating	570983.51	4747947.28	20	24	23	36	26	23	20	14	1	0	0
242	Year-Round Residence	Non-Participating	570806.77	4747367.86	20	23	22	35	26	22	20	14	2	0	0
251	Year-Round Residence	Non-Participating	571774.89	4748195.40	20	25	23	36	26	23	20	13	0	0	0
281	Year-Round Residence	Non-Participating	570677.59	4752235.20	20	26	24	38	25	22	19	14	0	0	0
241	Year-Round Residence	Non-Participating	570698.85	4752211.43	20	25	24	37	25	22	19	13	0	0	0
124	Public	Non-Participating	570968.78	4747357.96	20	23	21	35	25	22	19	14	1	0	0
194	Year-Round Residence	Non-Participating	570834.00	4747298.07	20	23	21	35	25	22	19	14	1	0	0
210	Year-Round Residence	Non-Participating	570959.39	4747906.86	20	24	23	36	26	22	19	13	0	0	0
8	Year-Round Residence	Non-Participating	572415.54	4750611.42	20	24	22	35	26	22	19	13	0	0	0
21	Unknown	Non-Participating	568839.30	4751716.12	20	24	22	35	26	22	19	13	1	0	0
162	Year-Round Residence	Non-Participating	568927.42	4752694.00	20	28	26	40	24	20	18	14	0	0	0
173	Public	Non-Participating	569542.00	4752016.12	20	23	22	35	26	22	19	13	0	0	0
256	Year-Round Residence	Non-Participating	572322.77	4748674.34	20	24	23	36	26	22	19	13	1	0	0

Table E-1.1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
272	Year-Round Residence	Non-Participating	569066.40	4752719.39	20	28	26	40	24	20	19	14	0	0	0
283	Year-Round Residence	Non-Participating	570687.96	4752247.74	20	25	24	37	25	21	19	13	0	0	0
187	Year-Round Residence	Non-Participating	570712.67	4752229.46	20	25	23	37	25	21	19	13	0	0	0
328	Year-Round Residence	Non-Participating	568602.80	4746806.20	20	25	24	38	24	20	18	15	1	0	0
65	Year-Round Residence	Non-Participating	569082.07	4752771.90	20	28	26	40	24	20	18	13	0	0	0
246	Year-Round Residence	Non-Participating	570828.31	4747616.50	20	24	22	35	26	22	19	13	0	0	0
266	Year-Round Residence	Non-Participating	568986.07	4752652.27	20	28	26	40	24	20	18	13	0	0	0
270	Year-Round Residence	Non-Participating	569047.23	4752666.41	20	28	26	40	24	20	18	13	0	0	0
329	Year-Round Residence	Non-Participating	568733.82	4746784.15	20	25	24	38	24	20	18	14	1	0	0
43	Unknown	Non-Participating	568611.35	4747212.27	20	22	21	34	25	22	19	13	1	0	0
67	Year-Round Residence	Non-Participating	569092.69	4752804.29	20	28	26	40	24	20	18	13	0	0	0
235	Year-Round Residence	Non-Participating	569763.21	4752389.65	20	25	23	37	25	21	19	13	0	0	0
268	Year-Round Residence	Non-Participating	569018.22	4752677.46	20	27	26	40	24	20	18	13	0	0	0
101	Year-Round Residence	Non-Participating	569105.30	4752834.74	20	28	26	40	24	20	18	13	0	0	0
116	Year-Round Residence	Non-Participating	569040.58	4752804.64	20	28	26	40	24	20	18	13	0	0	0
166	Year-Round Residence	Non-Participating	568960.82	4752681.25	20	27	26	39	24	20	18	13	0	0	0
174	Year-Round Residence	Non-Participating	569297.82	4752760.00	20	27	26	39	24	20	18	13	0	0	0
232	Year-Round Residence	Non-Participating	569229.29	4752739.45	20	27	26	39	24	20	18	13	0	0	0
236	Public	Non-Participating	569927.13	4751691.92	20	24	22	35	26	22	19	12	0	0	0
119	Year-Round Residence	Non-Participating	567273.88	4751485.12	20	26	25	38	24	20	18	13	0	0	0
155	Year-Round Residence	Non-Participating	568847.75	4752692.33	20	27	26	39	24	20	18	13	0	0	0
177	Unknown	Non-Participating	569305.03	4752805.00	20	28	26	40	24	20	18	13	0	0	0
196	Year-Round Residence	Non-Participating	570720.66	4747177.49	20	23	21	35	25	22	19	13	0	0	0
250	Year-Round Residence	Non-Participating	572152.87	4748582.63	20	25	23	36	26	22	18	12	0	0	0
111	Year-Round Residence	Non-Participating	569058.22	4752858.04	19	28	26	40	24	20	18	13	0	0	0
117	Year-Round Residence	Non-Participating	567274.95	4751464.62	19	26	24	38	24	20	18	13	0	0	0
170	Year-Round Residence	Non-Participating	569255.59	4752648.98	19	27	25	39	24	20	18	12	0	0	0
244	Year-Round Residence	Non-Participating	570753.47	4747395.47	19	23	22	35	25	22	18	12	0	0	0
331	Year-Round Residence	Non-Participating	568649.05	4746694.51	19	25	23	37	24	20	18	14	0	0	0
2	Year-Round Residence	Non-Participating	569091.67	4751745.20	19	23	22	35	25	21	18	12	0	0	0
74	Year-Round Residence	Non-Participating	569075.15	4752458.60	19	24	22	36	24	21	18	13	0	0	0
4	Year-Round Residence	Non-Participating	568765.88	4751745.05	19	23	22	35	25	21	18	12	0	0	0
72	Year-Round Residence	Non-Participating	569017.46	4752535.02	19	25	23	37	24	20	18	13	0	0	0
73	Year-Round Residence	Non-Participating	569058.69	4752462.36	19	24	22	36	24	21	18	13	0	0	0
285	Year-Round Residence	Non-Participating	570701.89	4752256.18	19	22	21	34	25	21	18	12	0	0	0
308	Year-Round Residence	Non-Participating	567007.48	4747703.39	19	26	24	38	23	19	18	13	0	0	0
330	Year-Round Residence	Non-Participating	568379.26	4746530.30	19	26	24	38	23	19	18	14	0	0	0
5	Year-Round Residence	Non-Participating	571282.83	4751161.05	19	24	23	35	25	21	18	12	0	0	0
122	Year-Round Residence	Non-Participating	569012.08	4752481.96	19	24	22	36	24	21	18	13	0	0	0
123	Year-Round Residence	Non-Participating	569034.25	4752476.07	19	24	22	36	24	21	18	13	0	0	0
70	Year-Round Residence	Non-Participating	568984.15	4752538.61	19	25	23	37	24	20	18	12	0	0	0
121	Year-Round Residence	Non-Participating	568972.57	4752492.68	19	23	22	36	24	20	18	13	0	0	0
118	Year-Round Residence	Non-Participating	568941.24	4752495.21	19	23	22	35	24	20	18	12	0	0	0
286	Unknown	Non-Participating	570714.73	4752263.29	19	22	20	34	25	21	18	12	0	0	0
66	Year-Round Residence	Non-Participating	568907.64	4752505.78	19	23	22	35	24	20	18	12	0	0	0
262	Year-Round Residence	Non-Participating	567291.22	4751402.10	19	24	22	36	24	20	18	13	0	0	0
306	Year-Round Residence	Non-Participating	566979.42	4747637.85	19	25	24	38	23	19	17	13	0	0	0
10	Year-Round Residence	Non-Participating	573021.10	4750568.21	19	22	20	34	24	21	18	12	0	0	0
51	Year-Round Residence	Non-Participating	568847.72	4752520.66	19	23	22	35	24	20	18	12	0	0	0
56	Year-Round Residence	Non-Participating	568859.35	4752517.94	19	23	22	35	24	20	18	12	0	0	0
61	Year-Round Residence	Non-Participating	568875.55	4752518.54	19	23	22	35	24	20	18	12	0	0	0
332	Seasonal Residence	Non-Participating	568665.27	4746559.35	19	25	23	37	23	19	17	13	0	0	0
9	Year-Round Residence	Non-Participating	572979.30	4750586.96	19	22	20	34	24	21	18	12	0	0	0
68	Year-Round Residence	Non-Participating	568800.97	4752532.63	19	23	22	35	24	20	17	12	0	0	0
69	Year-Round Residence	Non-Participating	568815.67	4752529.72	19	23	22	35	24	20	18	12	0	0	0
130	Public	Non-Participating	573418.06	4749653.73	19	22	21	34	24	20	18	12	0	0	0
11	Year-Round Residence	Non-Participating	573062.52	4750545.30	18	22	20	33	24	20	18	11	0	0	0
273	Year-Round Residence	Non-Participating	568750.17	4752555.24	18	24	22	36	24	20	17	12	0	0	0
274	Year-Round Residence	Non-Participating	568719.06	4752557.98	18	24	22	36	24	20	17	12	0	0	0
279	Year-Round Residence	Non-Participating	570789.93	4752380.77	18	22	21	34	24	21	18	11	0	0	0
45	Year-Round Residence	Non-Participating	570790.46	4752329.08	18	22	20	33	24	21	18	11	0	0	0
58	Year-Round Residence	Non-Participating	568465.27	4752673.67	18	25	24	37	23	19	17	12	0	0	0
276	Year-Round Residence	Non-Participating	568702.37	4752563.05	18	24	22	36	24	20	17	12	0	0	0
277	Year-Round Residence	Non-Participating	568688.78	4752565.10	18	24	22	36	23	20	17	12	0	0	0
280	Year-Round Residence	Non-Participating	568658.45	4752576.57	18	24	22	36	23	20	17	12	0	0	0
53	Year-Round Residence	Non-Participating	568629.50	4752581.95	18	24	22	36	23	20	17	12	0	0	0
54	Year-Round Residence	Non-Participating	568612.37	4752587.89	18	24	22	36	23	20	17	11	0	0	0
60	Seasonal Residence	Non-Participating	568418.64	4752696.33	18	26	24	38	23	19	17	11	0	0	0
62	Seasonal Residence	Non-Participating	568398.88	4752701.37	18	25	24	38	23	19	17	11	0	0	0
255	Year-Round Residence	Non-Participating	570802.37	4752341.85	18	22	20	33	24	21	18	11	0	0	0
278	Year-Round Residence	Non-Participating	568673.40	4752570.61	18	24	22	36	23	20	17	12	0	0	0
333	Year-Round Residence	Non-Participating	568658.15	4746482.43	18	24	23	36	23	19	17	12	0	0	0
55	Year-Round Residence	Non-Participating	568576.83	4752594.95	18	24	22	36	23	20	17	11	0	0	0
57	Year-Round Residence	Non-Participating	568531.64	4752604.53	18	24	23	36	23	19	17	11	0	0	0
120	Year-Round Residence	Non-Participating	567750.08	4752130.74	18	23	22	35	23	19	17	12	0	0	0
271	Year-Round Residence	Non-Participating	570838.81	4752353.57	18	22	20	33	24	20	17	11	0	0	0
275	Year-Round Residence	Non-Participating	570837.96	4752436.24	18	22	21	34	24	20	17	11	0	0	0
25	Unknown	Non-Participating	573141.34	4750526.06	18	21	20	33	24	20	17	11	0	0	0
63	Year-Round Residence	Non-Participating	568369.11	4752701.07	18	25	23	37	23	19	17	11	0	0	0
129	Year-Round Residence	Non-Participating	573514.91	4749609.38	18	22	20	34	24	20	17	11	0	0	0
264	Year-Round Residence	Non-Participating	570820.38	4752315.64	18	22	20	33	24	20	17	10	0	0	0
314	Public	Non-Participating	573576.04	4749828.47	18	23	21	35	23	20	17	11	0	0	0
198	Year-Round Residence	Non-Participating	570403.64	4746898.30	18	22	20	33	24	20	17	11	0	0	0
200	Year-Round Residence	Non-Participating	570444.44	4746893.04	18	22	20	33	23	20	17	10	0	0	0
218	Public	Non-Participating	568075.89	4752556.37	18	24	23	36	23	19	16	11	0	0	0
320	Year-Round Residence	Non-Participating	566847.98	4747795.26	18	24	23	37	23	19	16	11	0	0	0
208	Year-Round Residence	Non-Participating	570306.53	4746795.57	18	21	20	33	23	20	17	10	0	0	0
334	Year-Round Residence	Non-Participating	569416.12	4746629.33	18	21	19	33	23	20	17	10	0	0	0
339	Year-Round Residence	Non-Participating	570502.82	4746733.69	17	21	20	33	23	20	16	10	0	0	0
202	Year-Round Residence	Non-Participating	570544.19	4746908.91	17	21	20	33	23	19	16	10	0	0	0
92	Public	Non-Participating	567848.44	4752102.04	17	21	19	33	23	19	16	10	0	0	0
204	Unknown	Non-Participating	570640.92	4746963.17	17	21	20	33	23	19	16	10	0	0	0
229	Unknown	Non-Participating	568222.99	4752734.08	17	24	22	36	23	19	16	10	0	0	0
338	Year-Round Residence	Non-Participating	570214.03	4746605.64	17	21	19	33	23	19	16	10	0	0	0

Table E-1.1: Short-Term Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 1-hr Leq (dBA)[1]	Leq (dB) - Extrapolated	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		16 Hz	31.5	63	125	250	500	1000	2000	4000	8000
341	Public	Non-Participating	570636.02	4746880.89	17	21	20	33	23	19	16	10	0	0	0
342	Seasonal Residence	Non-Participating	570631.08	4746914.46	17	21	20	33	23	19	16	10	0	0	0
80	Year-Round Residence	Non-Participating	573433.33	4750244.45	17	21	19	33	23	19	16	10	0	0	0
205	Year-Round Residence	Non-Participating	570673.58	4746983.15	17	21	20	33	23	19	16	10	0	0	0
335	Year-Round Residence	Non-Participating	569383.86	4746504.34	17	21	19	33	23	19	16	10	0	0	0
343	Year-Round Residence	Non-Participating	570677.55	4746933.28	17	21	20	33	23	19	16	10	0	0	0
79	Year-Round Residence	Non-Participating	573380.58	4750282.73	17	21	19	33	23	19	16	9	0	0	0
304	Year-Round Residence	Non-Participating	566802.31	4748189.24	17	20	19	32	23	19	16	10	0	0	0
337	Year-Round Residence	Non-Participating	570085.96	4746487.53	17	21	19	33	23	19	16	9	0	0	0
336	Seasonal Residence	Non-Participating	569777.18	4746578.72	17	21	19	33	23	19	16	9	0	0	0
344	Year-Round Residence	Non-Participating	570748.93	4746980.95	17	21	20	33	23	19	16	9	0	0	0
305	Year-Round Residence	Non-Participating	566642.20	4748163.67	16	20	18	32	22	18	15	9	0	0	0
345	Year-Round Residence	Non-Participating	570882.06	4747052.83	14	20	19	31	21	16	12	4	0	0	0

1. Addresses stipulation (e) (1).

Appendix F

Sound Level Modeling Results—Long-term

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
1	Year-Round Residence	Non-Participating	569876.41	4751052.94	27	27	17
2	Year-Round Residence	Non-Participating	569091.67	4751745.20	19	19	8
3	Unknown	Non-Participating	568943.15	4751628.92	24	24	13
4	Year-Round Residence	Non-Participating	568765.88	4751745.05	19	19	9
5	Year-Round Residence	Non-Participating	571282.83	4751161.05	19	19	11
6	Year-Round Residence	Non-Participating	571504.09	4751087.43	22	22	16
7	Year-Round Residence	Non-Participating	572330.47	4750641.72	22	22	14
8	Year-Round Residence	Non-Participating	572415.54	4750611.42	20	20	13
9	Year-Round Residence	Non-Participating	572979.30	4750586.96	19	19	10
10	Year-Round Residence	Non-Participating	573021.10	4750568.21	19	19	10
11	Year-Round Residence	Non-Participating	573062.52	4750545.30	18	18	10
12	Year-Round Residence	Non-Participating	569524.01	4750447.60	40	40	29
13	Year-Round Residence	Participating	569470.27	4750326.39	44	44	32
14	Year-Round Residence	Non-Participating	569440.20	4750949.47	35	35	23
15	Year-Round Residence	Non-Participating	569657.94	4751219.48	24	24	15
16	Year-Round Residence	Non-Participating	569637.22	4751255.05	24	24	15
17	Year-Round Residence	Non-Participating	569616.81	4751281.68	24	24	15
18	Year-Round Residence	Non-Participating	569001.55	4751753.69	22	22	12
19	Year-Round Residence	Non-Participating	568953.46	4751703.03	20	20	11
20	Year-Round Residence	Non-Participating	568968.94	4751687.04	21	21	11
21	Unknown	Non-Participating	568839.30	4751716.12	20	20	10
22	Year-Round Residence	Non-Participating	571684.32	4751002.03	22	22	14
23	Year-Round Residence	Non-Participating	571711.42	4750985.73	22	22	17
24	Unknown	Non-Participating	571751.21	4750950.58	22	22	16
25	Unknown	Non-Participating	573141.34	4750526.06	18	18	10
26	Year-Round Residence	Non-Participating	572327.57	4749300.33	28	28	19
27	Year-Round Residence	Non-Participating	572084.90	4749382.45	38	38	27
28	Year-Round Residence	Non-Participating	569441.95	4748878.66	40	40	28
29	Year-Round Residence	Non-Participating	572033.45	4749443.89	38	38	27
30	Unknown	Non-Participating	568264.94	4750086.08	34	34	22
31	Year-Round Residence	Non-Participating	572177.45	4749579.83	34	34	23
32	Year-Round Residence	Non-Participating	569446.59	4748766.97	41	41	29
33	Unknown	Participating	571797.79	4749526.97	39	39	28
34	Year-Round Residence	Non-Participating	571947.48	4749538.14	38	38	27
35	Year-Round Residence	Non-Participating	569111.71	4748348.90	30	30	18
36	Year-Round Residence	Non-Participating	572064.46	4749493.97	37	37	26
37	Year-Round Residence	Non-Participating	570876.79	4749847.02	37	37	30
38	Year-Round Residence	Non-Participating	570986.36	4749841.17	37	37	30
39	Year-Round Residence	Non-Participating	568959.03	4748022.54	27	27	16
40	Year-Round Residence	Non-Participating	570421.97	4749520.25	36	36	25
41	Year-Round Residence	Non-Participating	569669.89	4749038.11	40	40	29
42	Year-Round Residence	Non-Participating	567888.53	4749797.92	30	30	18
43	Unknown	Non-Participating	568611.35	4747212.27	20	20	9
44	Year-Round Residence	Non-Participating	568489.11	4747519.28	21	21	10
45	Year-Round Residence	Non-Participating	570790.46	4752329.08	18	18	10
46	Year-Round Residence	Non-Participating	568550.20	4747544.78	21	21	10
47	Year-Round Residence	Non-Participating	567865.22	4749673.74	29	29	18
48	Year-Round Residence	Non-Participating	568591.16	4747567.45	22	22	10
49	Year-Round Residence	Non-Participating	568639.14	4747589.76	22	22	10
50	Year-Round Residence	Non-Participating	571277.88	4749688.74	41	41	31
51	Year-Round Residence	Non-Participating	568847.72	4752520.66	19	19	8
52	Year-Round Residence	Non-Participating	571154.45	4749594.94	40	40	29
53	Year-Round Residence	Non-Participating	568629.50	4752581.95	18	18	8
54	Year-Round Residence	Non-Participating	568612.37	4752587.89	18	18	8
55	Year-Round Residence	Non-Participating	568576.83	4752594.95	18	18	8
56	Year-Round Residence	Non-Participating	568859.35	4752517.94	19	19	8
57	Year-Round Residence	Non-Participating	568531.64	4752604.53	18	18	8
58	Year-Round Residence	Non-Participating	568465.27	4752673.67	18	18	8
59	Year-Round Residence	Non-Participating	572321.59	4751532.72	24	24	16
60	Seasonal Residence	Non-Participating	568418.64	4752696.33	18	18	8
61	Year-Round Residence	Non-Participating	568875.55	4752518.54	19	19	8
62	Seasonal Residence	Non-Participating	568398.88	4752701.37	18	18	8
63	Year-Round Residence	Non-Participating	568369.11	4752701.07	18	18	7

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
64	Year-Round Residence	Non-Participating	570913.76	4751988.61	22	22	13
65	Year-Round Residence	Non-Participating	569082.07	4752771.90	20	20	9
66	Year-Round Residence	Non-Participating	568907.64	4752505.78	19	19	9
67	Year-Round Residence	Non-Participating	569092.69	4752804.29	20	20	9
68	Year-Round Residence	Non-Participating	568800.97	4752532.63	19	19	8
69	Year-Round Residence	Non-Participating	568815.67	4752529.72	19	19	8
70	Year-Round Residence	Non-Participating	568984.15	4752538.61	19	19	9
71	Year-Round Residence	Non-Participating	570930.65	4751985.07	22	22	13
72	Year-Round Residence	Non-Participating	569017.46	4752535.02	19	19	9
73	Year-Round Residence	Non-Participating	569058.69	4752462.36	19	19	9
74	Year-Round Residence	Non-Participating	569075.15	4752458.60	19	19	9
75	Year-Round Residence	Non-Participating	572032.87	4751754.39	23	23	17
76	Year-Round Residence	Non-Participating	570962.92	4751977.55	22	22	13
77	Year-Round Residence	Non-Participating	570980.50	4751971.19	22	22	13
78	Unknown	Non-Participating	571987.72	4751800.17	23	23	16
79	Year-Round Residence	Non-Participating	573380.58	4750282.73	17	17	9
80	Year-Round Residence	Non-Participating	573433.33	4750244.45	17	17	8
81	Year-Round Residence	Non-Participating	571701.79	4749407.25	42	42	30
82	Year-Round Residence	Non-Participating	572571.58	4749673.02	24	24	14
83	Year-Round Residence	Non-Participating	570739.32	4749840.37	35	35	26
84	Unknown	Participating	569760.25	4749026.80	43	43	32
85	Year-Round Residence	Non-Participating	570902.01	4749780.07	35	35	26
86	Year-Round Residence	Non-Participating	570457.76	4749533.71	36	36	25
87	Year-Round Residence	Non-Participating	568144.54	4749953.20	32	32	21
88	Year-Round Residence	Non-Participating	569631.58	4749014.15	40	40	28
89	Year-Round Residence	Non-Participating	569415.06	4748678.47	39	39	27
90	Year-Round Residence	Non-Participating	569428.11	4747994.95	31	31	19
91	Year-Round Residence	Non-Participating	568048.14	4749868.45	31	31	19
92	Public	Non-Participating	567848.44	4752102.04	17	17	7
93	Year-Round Residence	Non-Participating	569022.44	4748078.18	28	28	16
94	Year-Round Residence	Non-Participating	568051.46	4749798.66	26	26	14
95	Year-Round Residence	Non-Participating	568728.69	4747747.82	27	27	15
96	Year-Round Residence	Non-Participating	568585.66	4747680.03	26	26	15
97	Year-Round Residence	Non-Participating	568389.52	4747575.92	21	21	10
98	Public	Non-Participating	569590.18	4747825.90	27	27	15
99	Public	Non-Participating	568171.18	4749475.13	32	32	21
100	Public	Non-Participating	569612.16	4747904.70	30	30	18
101	Year-Round Residence	Non-Participating	569105.30	4752834.74	20	20	9
102	Public	Participating	570176.10	4748800.96	40	40	28
103	Year-Round Residence	Non-Participating	568269.88	4749416.75	33	33	22
104	Year-Round Residence	Non-Participating	570501.36	4748524.92	31	31	20
105	Public	Non-Participating	570370.25	4748493.89	38	38	26
106	Public	Non-Participating	570443.52	4748526.07	32	32	21
107	Year-Round Residence	Non-Participating	568324.87	4749349.20	34	34	22
108	Public	Participating	571050.00	4749359.91	42	42	31
109	Year-Round Residence	Non-Participating	570804.68	4750125.53	39	39	35
110	Year-Round Residence	Non-Participating	568509.97	4749412.15	35	35	24
111	Year-Round Residence	Non-Participating	569058.22	4752858.04	19	19	9
112	Year-Round Residence	Non-Participating	568490.94	4749300.23	35	35	24
113	Year-Round Residence	Non-Participating	568448.25	4749188.07	36	36	24
114	Public	Non-Participating	572056.82	4750775.08	21	21	13
115	Year-Round Residence	Non-Participating	568520.71	4749125.93	36	36	25
116	Year-Round Residence	Non-Participating	569040.58	4752804.64	20	20	9
117	Year-Round Residence	Non-Participating	567274.95	4751464.62	19	19	8
118	Year-Round Residence	Non-Participating	568941.24	4752495.21	19	19	9
119	Year-Round Residence	Non-Participating	567273.88	4751485.12	20	20	8
120	Year-Round Residence	Non-Participating	567750.08	4752130.74	18	18	7
121	Year-Round Residence	Non-Participating	568972.57	4752492.68	19	19	9
122	Year-Round Residence	Non-Participating	569012.08	4752481.96	19	19	9
123	Year-Round Residence	Non-Participating	569034.25	4752476.07	19	19	9
124	Public	Non-Participating	570968.78	4747357.96	20	20	10
125	Year-Round Residence	Non-Participating	572739.97	4749821.10	22	22	13
126	Year-Round Residence	Non-Participating	572899.93	4749689.24	21	21	12

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
127	Public	Non-Participating	569386.40	4748827.47	39	39	27
128	Year-Round Residence	Non-Participating	573037.69	4749750.94	21	21	11
129	Year-Round Residence	Non-Participating	573514.91	4749609.38	18	18	9
130	Public	Non-Participating	573418.06	4749653.73	19	19	9
131	Year-Round Residence	Non-Participating	569204.55	4748614.37	33	33	21
132	Year-Round Residence	Non-Participating	572071.13	4749860.32	30	30	21
133	Year-Round Residence	Non-Participating	572150.30	4749829.72	29	29	21
134	Year-Round Residence	Non-Participating	567898.75	4749472.43	29	29	18
135	Year-Round Residence	Non-Participating	572163.98	4749694.57	32	32	22
136	Year-Round Residence	Non-Participating	570761.86	4750201.02	40	40	36
137	Unknown	Non-Participating	572108.67	4749706.21	32	32	22
138	Year-Round Residence	Non-Participating	571317.50	4750220.80	39	39	32
139	Year-Round Residence	Non-Participating	571168.68	4750042.07	39	39	33
140	Year-Round Residence	Non-Participating	570699.66	4750286.79	39	39	35
141	Year-Round Residence	Non-Participating	571140.33	4749988.53	38	38	32
142	Year-Round Residence	Non-Participating	571087.93	4749888.48	37	37	31
143	Year-Round Residence	Non-Participating	571206.87	4749823.38	39	39	30
144	Public	Participating	570354.70	4750012.67	37	37	26
145	Year-Round Residence	Non-Participating	571349.13	4749789.94	41	41	30
146	Year-Round Residence	Non-Participating	570965.96	4749992.84	38	38	33
147	Year-Round Residence	Non-Participating	567692.70	4749312.40	29	29	17
148	Year-Round Residence	Non-Participating	571002.35	4749946.95	38	38	32
149	Year-Round Residence	Non-Participating	568587.91	4750965.35	32	32	20
150	Year-Round Residence	Non-Participating	570747.24	4749752.29	35	35	25
151	Year-Round Residence	Non-Participating	570295.34	4749481.41	37	37	25
152	Year-Round Residence	Participating	569899.10	4749419.76	38	38	27
153	Year-Round Residence	Non-Participating	568569.87	4750842.99	32	32	20
154	Unknown	Non-Participating	569564.70	4748956.73	41	41	29
155	Year-Round Residence	Non-Participating	568847.75	4752692.33	20	20	9
156	Year-Round Residence	Non-Participating	568273.23	4750195.92	34	34	22
157	Year-Round Residence	Non-Participating	567640.59	4749265.62	28	28	17
158	Year-Round Residence	Non-Participating	568312.30	4750143.06	34	34	22
159	Year-Round Residence	Non-Participating	567594.38	4749243.34	28	28	16
160	Year-Round Residence	Non-Participating	569844.91	4752385.69	21	21	11
161	Year-Round Residence	Non-Participating	567558.69	4749219.42	28	28	16
162	Year-Round Residence	Non-Participating	568927.42	4752694.00	20	20	9
163	Year-Round Residence	Non-Participating	567887.61	4748293.78	30	30	18
164	Year-Round Residence	Non-Participating	567829.18	4750072.95	29	29	18
165	Year-Round Residence	Non-Participating	567854.41	4750001.63	30	30	18
166	Year-Round Residence	Non-Participating	568960.82	4752681.25	20	20	9
167	Year-Round Residence	Non-Participating	567793.49	4749961.75	29	29	18
168	Year-Round Residence	Non-Participating	567758.90	4750004.18	29	29	17
169	Year-Round Residence	Non-Participating	567731.07	4750072.42	29	29	17
170	Year-Round Residence	Non-Participating	569255.59	4752648.98	19	19	9
171	Year-Round Residence	Non-Participating	567585.78	4750216.32	28	28	16
172	Year-Round Residence	Non-Participating	569879.13	4752379.87	21	21	11
173	Public	Non-Participating	569542.00	4752016.12	20	20	11
174	Year-Round Residence	Non-Participating	569297.82	4752760.00	20	20	9
175	Public	Non-Participating	570590.39	4752068.13	21	21	13
176	Year-Round Residence	Non-Participating	569810.04	4752510.27	21	21	13
177	Unknown	Non-Participating	569305.03	4752805.00	20	20	9
178	Year-Round Residence	Non-Participating	570469.61	4752147.17	21	21	12
179	Public	Non-Participating	570594.72	4752115.73	21	21	12
180	Year-Round Residence	Non-Participating	570631.53	4752070.08	21	21	13
181	Public	Non-Participating	570640.26	4752158.08	21	21	12
182	Year-Round Residence	Non-Participating	570648.56	4752117.38	21	21	13
183	Year-Round Residence	Non-Participating	570664.18	4752131.94	21	21	12
184	Year-Round Residence	Non-Participating	570672.98	4752148.82	21	21	12
185	Year-Round Residence	Non-Participating	570640.73	4752176.63	21	21	12
186	Year-Round Residence	Non-Participating	570677.42	4752164.58	21	21	12
187	Year-Round Residence	Non-Participating	570712.67	4752229.46	20	20	12
188	Year-Round Residence	Non-Participating	570657.92	4752210.57	21	21	12
189	Year-Round Residence	Non-Participating	570668.98	4752220.50	20	20	12

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
190	Year-Round Residence	Non-Participating	571232.55	4750542.16	38	38	33
191	Year-Round Residence	Non-Participating	571608.56	4750951.03	24	24	18
192	Public	Non-Participating	568362.74	4751682.34	21	21	10
193	Public	Non-Participating	567744.91	4750167.70	28	28	17
194	Year-Round Residence	Non-Participating	570834.00	4747298.07	20	20	10
195	Year-Round Residence	Non-Participating	571253.37	4750153.80	39	39	33
196	Year-Round Residence	Non-Participating	570720.66	4747177.49	20	20	9
197	Seasonal Residence	Participating	571131.83	4750132.46	36	36	30
198	Year-Round Residence	Non-Participating	570403.64	4746898.30	18	18	7
199	Unknown	Non-Participating	569257.69	4748905.61	35	35	23
200	Year-Round Residence	Non-Participating	570444.44	4746893.04	18	18	7
201	Year-Round Residence	Non-Participating	570673.93	4749725.35	35	35	25
202	Year-Round Residence	Non-Participating	570544.19	4746908.91	17	17	6
203	Year-Round Residence	Non-Participating	570325.87	4749494.82	37	37	25
204	Unknown	Non-Participating	570640.92	4746963.17	17	17	7
205	Year-Round Residence	Non-Participating	570673.58	4746983.15	17	17	7
206	Year-Round Residence	Non-Participating	569803.88	4749130.26	40	40	28
207	Year-Round Residence	Non-Participating	569146.41	4748470.60	31	31	19
208	Year-Round Residence	Non-Participating	570306.53	4746795.57	18	18	7
209	Year-Round Residence	Non-Participating	567872.58	4749460.82	30	30	19
210	Year-Round Residence	Non-Participating	570959.39	4747906.86	20	20	10
211	Year-Round Residence	Non-Participating	569091.23	4748469.17	33	33	21
212	Year-Round Residence	Non-Participating	570983.51	4747947.28	20	20	10
213	Year-Round Residence	Non-Participating	569004.26	4748579.18	35	35	23
214	Year-Round Residence	Non-Participating	570873.11	4748201.08	25	25	15
215	Year-Round Residence	Non-Participating	570837.62	4748244.37	27	27	16
216	Year-Round Residence	Non-Participating	567898.40	4749374.66	30	30	19
217	Public	Participating	570554.00	4750310.61	36	36	32
218	Public	Non-Participating	568075.89	4752556.37	18	18	7
219	Unknown	Non-Participating	570843.09	4750478.54	42	42	39
220	Year-Round Residence	Non-Participating	567915.86	4749336.42	30	30	18
221	Year-Round Residence	Non-Participating	570539.58	4750606.34	32	32	25
222	Year-Round Residence	Non-Participating	570500.38	4750670.52	31	31	24
223	Year-Round Residence	Non-Participating	567944.57	4749268.18	30	30	18
224	Unknown	Non-Participating	568375.18	4750338.33	33	33	22
225	Year-Round Residence	Non-Participating	567779.76	4749367.81	29	29	18
226	Year-Round Residence	Non-Participating	567703.11	4749411.58	29	29	17
227	Year-Round Residence	Non-Participating	567437.83	4749126.57	27	27	15
228	Year-Round Residence	Non-Participating	567395.20	4749095.60	26	26	15
229	Unknown	Non-Participating	568222.99	4752734.08	17	17	7
230	Public	Non-Participating	567865.85	4748367.78	30	30	18
231	Year-Round Residence	Non-Participating	567605.57	4750119.19	28	28	16
232	Year-Round Residence	Non-Participating	569229.29	4752739.45	20	20	9
233	Public	Non-Participating	567334.37	4750574.31	25	25	13
234	Year-Round Residence	Non-Participating	567305.82	4750627.27	24	24	13
235	Year-Round Residence	Non-Participating	569763.21	4752389.65	20	20	10
236	Public	Non-Participating	569927.13	4751691.92	20	20	12
237	Public	Non-Participating	570159.50	4751921.17	21	21	12
238	Year-Round Residence	Non-Participating	570649.57	4752189.59	21	21	12
239	Year-Round Residence	Non-Participating	570654.28	4752199.89	21	21	12
240	Year-Round Residence	Non-Participating	570687.51	4752185.79	21	21	12
241	Year-Round Residence	Non-Participating	570698.85	4752211.43	20	20	12
242	Year-Round Residence	Non-Participating	570806.77	4747367.86	20	20	10
243	Year-Round Residence	Non-Participating	570876.81	4750015.49	38	38	33
244	Year-Round Residence	Non-Participating	570753.47	4747395.47	19	19	9
245	Year-Round Residence	Non-Participating	570611.42	4749669.71	36	36	25
246	Year-Round Residence	Non-Participating	570828.31	4747616.50	20	20	10
247	Year-Round Residence	Non-Participating	569293.04	4748701.69	36	36	25
248	Year-Round Residence	Non-Participating	571541.55	4748220.90	21	21	11
249	Year-Round Residence	Non-Participating	570373.87	4749512.77	36	36	25
250	Year-Round Residence	Non-Participating	572152.87	4748582.63	20	20	11
251	Year-Round Residence	Non-Participating	571774.89	4748195.40	20	20	11
252	Year-Round Residence	Non-Participating	572393.50	4748198.39	21	21	11

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
253	Year-Round Residence	Non-Participating	569728.11	4749085.84	41	41	29
254	Year-Round Residence	Non-Participating	572532.80	4748449.56	22	22	11
255	Year-Round Residence	Non-Participating	570802.37	4752341.85	18	18	10
256	Year-Round Residence	Non-Participating	572322.77	4748674.34	20	20	11
257	Year-Round Residence	Non-Participating	572474.99	4748945.70	24	24	14
258	Public	Participating	568697.55	4748407.61	37	37	25
259	Year-Round Residence	Non-Participating	572457.84	4748744.73	21	21	11
260	Unknown	Non-Participating	572537.36	4749013.58	24	24	14
261	Year-Round Residence	Non-Participating	572277.40	4749489.23	33	33	23
262	Year-Round Residence	Non-Participating	567291.22	4751402.10	19	19	8
263	Unknown	Non-Participating	572359.76	4749488.35	29	29	19
264	Year-Round Residence	Non-Participating	570820.38	4752315.64	18	18	9
265	Year-Round Residence	Non-Participating	572476.37	4749562.90	26	26	18
266	Year-Round Residence	Non-Participating	568986.07	4752652.27	20	20	9
267	Year-Round Residence	Non-Participating	572129.12	4749426.56	36	36	25
268	Year-Round Residence	Non-Participating	569018.22	4752677.46	20	20	9
269	Year-Round Residence	Non-Participating	571413.35	4751717.60	23	23	15
270	Year-Round Residence	Non-Participating	569047.23	4752666.41	20	20	9
271	Year-Round Residence	Non-Participating	570838.81	4752353.57	18	18	10
272	Year-Round Residence	Non-Participating	569066.40	4752719.39	20	20	9
273	Year-Round Residence	Non-Participating	568750.17	4752555.24	18	18	8
274	Year-Round Residence	Non-Participating	568719.06	4752557.98	18	18	8
275	Year-Round Residence	Non-Participating	570837.96	4752436.24	18	18	10
276	Year-Round Residence	Non-Participating	568702.37	4752563.05	18	18	8
277	Year-Round Residence	Non-Participating	568688.78	4752565.10	18	18	8
278	Year-Round Residence	Non-Participating	568673.40	4752570.61	18	18	8
279	Year-Round Residence	Non-Participating	570789.93	4752380.77	18	18	10
280	Year-Round Residence	Non-Participating	568658.45	4752576.57	18	18	8
281	Year-Round Residence	Non-Participating	570677.59	4752235.20	20	20	12
282	Year-Round Residence	Non-Participating	571376.84	4751734.24	23	23	15
283	Year-Round Residence	Non-Participating	570687.96	4752247.74	20	20	12
284	Public	Non-Participating	570704.13	4752040.88	22	22	13
285	Year-Round Residence	Non-Participating	570701.89	4752256.18	19	19	11
286	Unknown	Non-Participating	570714.73	4752263.29	19	19	11
287	Year-Round Residence	Non-Participating	570809.45	4752018.40	22	22	13
288	Year-Round Residence	Non-Participating	571340.99	4751749.35	23	23	15
289	Year-Round Residence	Non-Participating	570850.30	4752006.93	22	22	13
290	Year-Round Residence	Non-Participating	570892.05	4751992.09	22	22	13
291	Year-Round Residence	Non-Participating	571014.88	4751970.46	22	22	13
292	Public	Non-Participating	571111.42	4751908.19	22	22	14
293	Unknown	Non-Participating	571304.34	4751778.21	23	23	14
294	Year-Round Residence	Non-Participating	571678.99	4751671.07	23	23	14
295	Year-Round Residence	Non-Participating	571547.10	4751180.35	23	23	17
296	Year-Round Residence	Non-Participating	572596.07	4750651.28	21	21	13
297	Year-Round Residence	Non-Participating	568443.92	4750372.68	33	33	22
298	Year-Round Residence	Non-Participating	568483.01	4750427.62	34	34	22
299	Year-Round Residence	Non-Participating	566688.38	4749344.81	23	23	11
300	Year-Round Residence	Non-Participating	566763.25	4749325.90	23	23	12
301	Year-Round Residence	Non-Participating	567163.35	4748887.86	25	25	14
302	Year-Round Residence	Non-Participating	567069.27	4748853.77	25	25	13
303	Public	Non-Participating	567059.75	4748700.62	25	25	13
304	Year-Round Residence	Non-Participating	566802.31	4748189.24	17	17	6
305	Year-Round Residence	Non-Participating	566642.20	4748163.67	16	16	5
306	Year-Round Residence	Non-Participating	566979.42	4747637.85	19	19	7
307	Year-Round Residence	Non-Participating	567099.23	4747774.79	22	22	10
308	Year-Round Residence	Non-Participating	567007.48	4747703.39	19	19	8
309	Year-Round Residence	Non-Participating	567351.84	4747727.92	22	22	11
310	Unknown	Non-Participating	567421.37	4747741.92	23	23	11
311	Year-Round Residence	Non-Participating	567709.57	4747729.47	24	24	12
312	Year-Round Residence	Non-Participating	568056.79	4747559.37	24	24	13
313	Year-Round Residence	Non-Participating	568143.55	4747492.78	24	24	12
314	Public	Non-Participating	573576.04	4749828.47	18	18	8
315	Year-Round Residence	Non-Participating	568602.80	4750580.02	34	34	23

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
316	Year-Round Residence	Non-Participating	566729.96	4749483.57	23	23	11
317	Year-Round Residence	Non-Participating	567279.52	4749013.61	26	26	14
318	Year-Round Residence	Non-Participating	567234.84	4748990.48	25	25	14
319	Year-Round Residence	Non-Participating	566706.31	4748690.52	23	23	11
320	Year-Round Residence	Non-Participating	566847.98	4747795.26	18	18	6
321	Year-Round Residence	Non-Participating	567019.43	4747556.38	21	21	9
322	Year-Round Residence	Non-Participating	567170.06	4747588.19	22	22	10
323	Year-Round Residence	Non-Participating	567591.57	4747854.92	24	24	13
324	Year-Round Residence	Non-Participating	567724.99	4748032.16	26	26	14
325	Public	Non-Participating	567924.69	4748484.41	32	32	20
326	Year-Round Residence	Non-Participating	567832.72	4747643.38	22	22	11
327	Year-Round Residence	Non-Participating	568602.98	4746920.16	21	21	9
328	Year-Round Residence	Non-Participating	568602.80	4746806.20	20	20	9
329	Year-Round Residence	Non-Participating	568733.82	4746784.15	20	20	9
330	Year-Round Residence	Non-Participating	568379.26	4746530.30	19	19	8
331	Year-Round Residence	Non-Participating	568649.05	4746694.51	19	19	8
332	Seasonal Residence	Non-Participating	568665.27	4746559.35	19	19	7
333	Year-Round Residence	Non-Participating	568658.15	4746482.43	18	18	7
334	Year-Round Residence	Non-Participating	569416.12	4746629.33	18	18	7
335	Year-Round Residence	Non-Participating	569383.86	4746504.34	17	17	6
336	Seasonal Residence	Non-Participating	569777.18	4746578.72	17	17	6
337	Year-Round Residence	Non-Participating	570085.96	4746487.53	17	17	6
338	Year-Round Residence	Non-Participating	570214.03	4746605.64	17	17	6
339	Year-Round Residence	Non-Participating	570502.82	4746733.69	17	17	7
340	Public	Non-Participating	569982.69	4747395.09	21	21	10
341	Public	Non-Participating	570636.02	4746880.89	17	17	7
342	Seasonal Residence	Non-Participating	570631.08	4746914.46	17	17	7
343	Year-Round Residence	Non-Participating	570677.55	4746933.28	17	17	7
344	Year-Round Residence	Non-Participating	570748.93	4746980.95	17	17	6
345	Year-Round Residence	Non-Participating	570882.06	4747052.83	14	14	3
346	Public	Participating	570231.70	4748743.29	40	40	28
347	Public	Non-Participating	571142.46	4749860.37	38	38	30
348	Year-Round Residence	Non-Participating	571902.73	4748867.86	33	33	23
349	Seasonal Residence	Participating	570990.46	4750073.71	40	40	35
350	Year-Round Residence	Non-Participating	570483.09	4750708.69	31	31	23
351	Year-Round Residence	Non-Participating	569936.19	4750675.83	34	34	23
352	Public	Non-Participating	569906.93	4751111.13	27	27	17
353	Year-Round Residence	Non-Participating	572130.00	4749927.83	28	28	21
354	Year-Round Residence	Non-Participating	572347.74	4749587.53	28	28	19
355	Year-Round Residence	Non-Participating	572388.99	4749601.27	27	27	19
356	Year-Round Residence	Non-Participating	572377.93	4749674.04	28	28	19
357	Year-Round Residence	Non-Participating	572403.52	4749657.29	27	27	18
358	Year-Round Residence	Non-Participating	572449.88	4749684.62	27	27	19
359	Year-Round Residence	Non-Participating	572422.83	4749715.98	28	28	19
360	Year-Round Residence	Non-Participating	572774.46	4749767.27	22	22	13
361	Year-Round Residence	Non-Participating	572717.98	4749764.92	23	23	13
362	Year-Round Residence	Non-Participating	572682.80	4749798.81	23	23	13
363	Year-Round Residence	Non-Participating	572762.62	4749789.18	22	22	13
364	Year-Round Residence	Non-Participating	572791.18	4749801.92	22	22	13
365	Year-Round Residence	Non-Participating	572751.22	4749831.40	23	23	13
366	Year-Round Residence	Non-Participating	572816.05	4749852.16	22	22	13
367	Year-Round Residence	Non-Participating	572803.74	4749814.71	22	22	13
368	Year-Round Residence	Non-Participating	572719.20	4749814.91	23	23	13
369	Year-Round Residence	Non-Participating	572700.86	4749809.70	23	23	13
370	Year-Round Residence	Non-Participating	572772.84	4749837.95	22	22	13
371	Year-Round Residence	Non-Participating	572843.77	4749757.31	22	22	12
372	Year-Round Residence	Non-Participating	572858.24	4749756.37	22	22	12
373	Year-Round Residence	Non-Participating	572872.27	4749754.77	22	22	12
374	Year-Round Residence	Non-Participating	572886.74	4749753.40	21	21	12
375	Year-Round Residence	Non-Participating	572911.71	4749774.18	21	21	12
376	Year-Round Residence	Non-Participating	572905.99	4749797.03	21	21	12
377	Year-Round Residence	Non-Participating	572906.50	4749811.44	22	22	12
378	Year-Round Residence	Non-Participating	572904.14	4749826.69	22	22	12

Table F-1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Receptor ID

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
379	Year-Round Residence	Non-Participating	572909.71	4749859.26	21	21	12
380	Year-Round Residence	Non-Participating	572900.61	4749664.73	21	21	12
381	Year-Round Residence	Non-Participating	572878.71	4749643.76	22	22	12
382	Year-Round Residence	Non-Participating	572834.22	4749666.64	22	22	12
383	Public	Non-Participating	572739.37	4749725.08	23	23	13
384	Year-Round Residence	Non-Participating	572913.11	4749843.02	21	21	12
385	Public	Non-Participating	567635.09	4747727.54	24	24	12
386	Seasonal Residence	Non-Participating	566901.78	4748735.92	24	24	12
387	Year-Round Residence	Non-Participating	567027.75	4749137.63	25	25	13
388	Year-Round Residence	Non-Participating	566845.68	4749079.73	24	24	12
389	Public	Non-Participating	566757.05	4749026.28	23	23	12

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
13	Year-Round Residence	Participating	569470.27	4750326.39	44	44	32
84	Unknown	Participating	569760.25	4749026.80	43	43	32
108	Public	Participating	571050.00	4749359.91	42	42	31
81	Year-Round Residence	Non-Participating	571701.79	4749407.25	42	42	30
219	Unknown	Non-Participating	570843.09	4750478.54	42	42	39
50	Year-Round Residence	Non-Participating	571277.88	4749688.74	41	41	31
154	Unknown	Non-Participating	569564.70	4748956.73	41	41	29
145	Year-Round Residence	Non-Participating	571349.13	4749789.94	41	41	30
253	Year-Round Residence	Non-Participating	569728.11	4749085.84	41	41	29
32	Year-Round Residence	Non-Participating	569446.59	4748766.97	41	41	29
41	Year-Round Residence	Non-Participating	569669.89	4749038.11	40	40	29
12	Year-Round Residence	Non-Participating	569524.01	4750447.60	40	40	29
102	Public	Participating	570176.10	4748800.96	40	40	28
206	Year-Round Residence	Non-Participating	569803.88	4749130.26	40	40	28
346	Public	Participating	570231.70	4748743.29	40	40	28
349	Seasonal Residence	Participating	570990.46	4750073.71	40	40	35
88	Year-Round Residence	Non-Participating	569631.58	4749014.15	40	40	28
136	Year-Round Residence	Non-Participating	570761.86	4750201.02	40	40	36
52	Year-Round Residence	Non-Participating	571154.45	4749594.94	40	40	29
28	Year-Round Residence	Non-Participating	569441.95	4748878.66	40	40	28
109	Year-Round Residence	Non-Participating	570804.68	4750125.53	39	39	35
138	Year-Round Residence	Non-Participating	571317.50	4750220.80	39	39	32
33	Unknown	Participating	571797.79	4749526.97	39	39	28
195	Year-Round Residence	Non-Participating	571253.37	4750153.80	39	39	33
127	Public	Non-Participating	569386.40	4748827.47	39	39	27
89	Year-Round Residence	Non-Participating	569415.06	4748678.47	39	39	27
140	Year-Round Residence	Non-Participating	570699.66	4750286.79	39	39	35
139	Year-Round Residence	Non-Participating	571168.68	4750042.07	39	39	33
143	Year-Round Residence	Non-Participating	571206.87	4749823.38	39	39	30
29	Year-Round Residence	Non-Participating	572033.45	4749443.89	38	38	27
141	Year-Round Residence	Non-Participating	571140.33	4749988.53	38	38	32
146	Year-Round Residence	Non-Participating	570965.96	4749992.84	38	38	33
152	Year-Round Residence	Participating	569899.10	4749419.76	38	38	27
243	Year-Round Residence	Non-Participating	570876.81	4750015.49	38	38	33
27	Year-Round Residence	Non-Participating	572084.90	4749382.45	38	38	27
105	Public	Non-Participating	570370.25	4748493.89	38	38	26
190	Year-Round Residence	Non-Participating	571232.55	4750542.16	38	38	33
347	Public	Non-Participating	571142.46	4749860.37	38	38	30
34	Year-Round Residence	Non-Participating	571947.48	4749538.14	38	38	27
148	Year-Round Residence	Non-Participating	571002.35	4749946.95	38	38	32
142	Year-Round Residence	Non-Participating	571087.93	4749888.48	37	37	31
258	Public	Participating	568697.55	4748407.61	37	37	25
36	Year-Round Residence	Non-Participating	572064.46	4749493.97	37	37	26
37	Year-Round Residence	Non-Participating	570876.79	4749847.02	37	37	30
144	Public	Participating	570354.70	4750012.67	37	37	26
151	Year-Round Residence	Non-Participating	570295.34	4749481.41	37	37	25
38	Year-Round Residence	Non-Participating	570986.36	4749841.17	37	37	30
203	Year-Round Residence	Non-Participating	570325.87	4749494.82	37	37	25
40	Year-Round Residence	Non-Participating	570421.97	4749520.25	36	36	25
197	Seasonal Residence	Participating	571131.83	4750132.46	36	36	30
247	Year-Round Residence	Non-Participating	569293.04	4748701.69	36	36	25
249	Year-Round Residence	Non-Participating	570373.87	4749512.77	36	36	25
86	Year-Round Residence	Non-Participating	570457.76	4749533.71	36	36	25
267	Year-Round Residence	Non-Participating	572129.12	4749426.56	36	36	25
115	Year-Round Residence	Non-Participating	568520.71	4749125.93	36	36	25
217	Public	Participating	570554.00	4750310.61	36	36	32
113	Year-Round Residence	Non-Participating	568448.25	4749188.07	36	36	24
245	Year-Round Residence	Non-Participating	570611.42	4749669.71	36	36	25
112	Year-Round Residence	Non-Participating	568490.94	4749300.23	35	35	24
201	Year-Round Residence	Non-Participating	570673.93	4749725.35	35	35	25
83	Year-Round Residence	Non-Participating	570739.32	4749840.37	35	35	26
110	Year-Round Residence	Non-Participating	568509.97	4749412.15	35	35	24
14	Year-Round Residence	Non-Participating	569440.20	4750949.47	35	35	23

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
150	Year-Round Residence	Non-Participating	570747.24	4749752.29	35	35	25
85	Year-Round Residence	Non-Participating	570902.01	4749780.07	35	35	26
213	Year-Round Residence	Non-Participating	569004.26	4748579.18	35	35	23
199	Unknown	Non-Participating	569257.69	4748905.61	35	35	23
315	Year-Round Residence	Non-Participating	568602.80	4750580.02	34	34	23
158	Year-Round Residence	Non-Participating	568312.30	4750143.06	34	34	22
351	Year-Round Residence	Non-Participating	569936.19	4750675.83	34	34	23
31	Year-Round Residence	Non-Participating	572177.45	4749579.83	34	34	23
107	Year-Round Residence	Non-Participating	568324.87	4749349.20	34	34	22
298	Year-Round Residence	Non-Participating	568483.01	4750427.62	34	34	22
30	Unknown	Non-Participating	568264.94	4750086.08	34	34	22
156	Year-Round Residence	Non-Participating	568273.23	4750195.92	34	34	22
348	Year-Round Residence	Non-Participating	571902.73	4748867.86	33	33	23
103	Year-Round Residence	Non-Participating	568269.88	4749416.75	33	33	22
297	Year-Round Residence	Non-Participating	568443.92	4750372.68	33	33	22
224	Unknown	Non-Participating	568375.18	4750338.33	33	33	22
261	Year-Round Residence	Non-Participating	572277.40	4749489.23	33	33	23
131	Year-Round Residence	Non-Participating	569204.55	4748614.37	33	33	21
211	Year-Round Residence	Non-Participating	569091.23	4748469.17	33	33	21
99	Public	Non-Participating	568171.18	4749475.13	32	32	21
87	Year-Round Residence	Non-Participating	568144.54	4749953.20	32	32	21
135	Year-Round Residence	Non-Participating	572163.98	4749694.57	32	32	22
153	Year-Round Residence	Non-Participating	568569.87	4750842.99	32	32	20
106	Public	Non-Participating	570443.52	4748526.07	32	32	21
137	Unknown	Non-Participating	572108.67	4749706.21	32	32	22
325	Public	Non-Participating	567924.69	4748484.41	32	32	20
149	Year-Round Residence	Non-Participating	568587.91	4750965.35	32	32	20
221	Year-Round Residence	Non-Participating	570539.58	4750606.34	32	32	25
104	Year-Round Residence	Non-Participating	570501.36	4748524.92	31	31	20
222	Year-Round Residence	Non-Participating	570500.38	4750670.52	31	31	24
90	Year-Round Residence	Non-Participating	569428.11	4747994.95	31	31	19
350	Year-Round Residence	Non-Participating	570483.09	4750708.69	31	31	23
91	Year-Round Residence	Non-Participating	568048.14	4749868.45	31	31	19
207	Year-Round Residence	Non-Participating	569146.41	4748470.60	31	31	19
216	Year-Round Residence	Non-Participating	567898.40	4749374.66	30	30	19
209	Year-Round Residence	Non-Participating	567872.58	4749460.82	30	30	19
220	Year-Round Residence	Non-Participating	567915.86	4749336.42	30	30	18
223	Year-Round Residence	Non-Participating	567944.57	4749268.18	30	30	18
230	Public	Non-Participating	567865.85	4748367.78	30	30	18
42	Year-Round Residence	Non-Participating	567888.53	4749797.92	30	30	18
35	Year-Round Residence	Non-Participating	569111.71	4748348.90	30	30	18
100	Public	Non-Participating	569612.16	4747904.70	30	30	18
132	Year-Round Residence	Non-Participating	572071.13	4749860.32	30	30	21
163	Year-Round Residence	Non-Participating	567887.61	4748293.78	30	30	18
165	Year-Round Residence	Non-Participating	567854.41	4750001.63	30	30	18
47	Year-Round Residence	Non-Participating	567865.22	4749673.74	29	29	18
134	Year-Round Residence	Non-Participating	567898.75	4749472.43	29	29	18
164	Year-Round Residence	Non-Participating	567829.18	4750072.95	29	29	18
225	Year-Round Residence	Non-Participating	567779.76	4749367.81	29	29	18
167	Year-Round Residence	Non-Participating	567793.49	4749961.75	29	29	18
226	Year-Round Residence	Non-Participating	567703.11	4749411.58	29	29	17
133	Year-Round Residence	Non-Participating	572150.30	4749829.72	29	29	21
147	Year-Round Residence	Non-Participating	567692.70	4749312.40	29	29	17
168	Year-Round Residence	Non-Participating	567758.90	4750004.18	29	29	17
263	Unknown	Non-Participating	572359.76	4749488.35	29	29	19
169	Year-Round Residence	Non-Participating	567731.07	4750072.42	29	29	17
26	Year-Round Residence	Non-Participating	572327.57	4749300.33	28	28	19
356	Year-Round Residence	Non-Participating	572377.93	4749674.04	28	28	19
157	Year-Round Residence	Non-Participating	567640.59	4749265.62	28	28	17
353	Year-Round Residence	Non-Participating	572130.00	4749927.83	28	28	21
193	Public	Non-Participating	567744.91	4750167.70	28	28	17
159	Year-Round Residence	Non-Participating	567594.38	4749243.34	28	28	16
93	Year-Round Residence	Non-Participating	569022.44	4748078.18	28	28	16

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
354	Year-Round Residence	Non-Participating	572347.74	4749587.53	28	28	19
231	Year-Round Residence	Non-Participating	567605.57	4750119.19	28	28	16
161	Year-Round Residence	Non-Participating	567558.69	4749219.42	28	28	16
171	Year-Round Residence	Non-Participating	567585.78	4750216.32	28	28	16
359	Year-Round Residence	Non-Participating	572422.83	4749715.98	28	28	19
39	Year-Round Residence	Non-Participating	568959.03	4748022.54	27	27	16
358	Year-Round Residence	Non-Participating	572449.88	4749684.62	27	27	19
1	Year-Round Residence	Non-Participating	569876.41	4751052.94	27	27	17
355	Year-Round Residence	Non-Participating	572388.99	4749601.27	27	27	19
215	Year-Round Residence	Non-Participating	570837.62	4748244.37	27	27	16
352	Public	Non-Participating	569906.93	4751111.13	27	27	17
95	Year-Round Residence	Non-Participating	568728.69	4747747.82	27	27	15
357	Year-Round Residence	Non-Participating	572403.52	4749657.29	27	27	18
98	Public	Non-Participating	569590.18	4747825.90	27	27	15
227	Year-Round Residence	Non-Participating	567437.83	4749126.57	27	27	15
265	Year-Round Residence	Non-Participating	572476.37	4749562.90	26	26	18
96	Year-Round Residence	Non-Participating	568585.66	4747680.03	26	26	15
228	Year-Round Residence	Non-Participating	567395.20	4749095.60	26	26	15
324	Year-Round Residence	Non-Participating	567724.99	4748032.16	26	26	14
94	Year-Round Residence	Non-Participating	568051.46	4749798.66	26	26	14
317	Year-Round Residence	Non-Participating	567279.52	4749013.61	26	26	14
301	Year-Round Residence	Non-Participating	567163.35	4748887.86	25	25	14
214	Year-Round Residence	Non-Participating	570873.11	4748201.08	25	25	15
318	Year-Round Residence	Non-Participating	567234.84	4748990.48	25	25	14
302	Year-Round Residence	Non-Participating	567069.27	4748853.77	25	25	13
233	Public	Non-Participating	567334.37	4750574.31	25	25	13
387	Year-Round Residence	Non-Participating	567027.75	4749137.63	25	25	13
303	Public	Non-Participating	567059.75	4748700.62	25	25	13
17	Year-Round Residence	Non-Participating	569616.81	4751281.68	24	24	15
3	Unknown	Non-Participating	568943.15	4751628.92	24	24	13
234	Year-Round Residence	Non-Participating	567305.82	4750627.27	24	24	13
82	Year-Round Residence	Non-Participating	572571.58	4749673.02	24	24	14
260	Unknown	Non-Participating	572537.36	4749013.58	24	24	14
312	Year-Round Residence	Non-Participating	568056.79	4747559.37	24	24	13
323	Year-Round Residence	Non-Participating	567591.57	4747854.92	24	24	13
16	Year-Round Residence	Non-Participating	569637.22	4751255.05	24	24	15
257	Year-Round Residence	Non-Participating	572474.99	4748945.70	24	24	14
15	Year-Round Residence	Non-Participating	569657.94	4751219.48	24	24	15
191	Year-Round Residence	Non-Participating	571608.56	4750951.03	24	24	18
311	Year-Round Residence	Non-Participating	567709.57	4747729.47	24	24	12
313	Year-Round Residence	Non-Participating	568143.55	4747492.78	24	24	12
59	Year-Round Residence	Non-Participating	572321.59	4751532.72	24	24	16
386	Seasonal Residence	Non-Participating	566901.78	4748735.92	24	24	12
385	Public	Non-Participating	567635.09	4747727.54	24	24	12
388	Year-Round Residence	Non-Participating	566845.68	4749079.73	24	24	12
75	Year-Round Residence	Non-Participating	572032.87	4751754.39	23	23	17
78	Unknown	Non-Participating	571987.72	4751800.17	23	23	16
300	Year-Round Residence	Non-Participating	566763.25	4749325.90	23	23	12
295	Year-Round Residence	Non-Participating	571547.10	4751180.35	23	23	17
389	Public	Non-Participating	566757.05	4749026.28	23	23	12
269	Year-Round Residence	Non-Participating	571413.35	4751717.60	23	23	15
316	Year-Round Residence	Non-Participating	566729.96	4749483.57	23	23	11
362	Year-Round Residence	Non-Participating	572682.80	4749798.81	23	23	13
282	Year-Round Residence	Non-Participating	571376.84	4751734.24	23	23	15
288	Year-Round Residence	Non-Participating	571340.99	4751749.35	23	23	15
294	Year-Round Residence	Non-Participating	571678.99	4751671.07	23	23	14
299	Year-Round Residence	Non-Participating	566688.38	4749344.81	23	23	11
293	Unknown	Non-Participating	571304.34	4751778.21	23	23	14
369	Year-Round Residence	Non-Participating	572700.86	4749809.70	23	23	13
361	Year-Round Residence	Non-Participating	572717.98	4749764.92	23	23	13
368	Year-Round Residence	Non-Participating	572719.20	4749814.91	23	23	13
310	Unknown	Non-Participating	567421.37	4747741.92	23	23	11
319	Year-Round Residence	Non-Participating	566706.31	4748690.52	23	23	11

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
365	Year-Round Residence	Non-Participating	572751.22	4749831.40	23	23	13
383	Public	Non-Participating	572739.37	4749725.08	23	23	13
23	Year-Round Residence	Non-Participating	571711.42	4750985.73	22	22	17
125	Year-Round Residence	Non-Participating	572739.97	4749821.10	22	22	13
24	Unknown	Non-Participating	571751.21	4750950.58	22	22	16
309	Year-Round Residence	Non-Participating	567351.84	4747727.92	22	22	11
363	Year-Round Residence	Non-Participating	572762.62	4749789.18	22	22	13
370	Year-Round Residence	Non-Participating	572772.84	4749837.95	22	22	13
292	Public	Non-Participating	571111.42	4751908.19	22	22	14
326	Year-Round Residence	Non-Participating	567832.72	4747643.38	22	22	11
360	Year-Round Residence	Non-Participating	572774.46	4749767.27	22	22	13
6	Year-Round Residence	Non-Participating	571504.09	4751087.43	22	22	16
18	Year-Round Residence	Non-Participating	569001.55	4751753.69	22	22	12
364	Year-Round Residence	Non-Participating	572791.18	4749801.92	22	22	13
366	Year-Round Residence	Non-Participating	572816.05	4749852.16	22	22	13
77	Year-Round Residence	Non-Participating	570980.50	4751971.19	22	22	13
367	Year-Round Residence	Non-Participating	572803.74	4749814.71	22	22	13
64	Year-Round Residence	Non-Participating	570913.76	4751988.61	22	22	13
71	Year-Round Residence	Non-Participating	570930.65	4751985.07	22	22	13
76	Year-Round Residence	Non-Participating	570962.92	4751977.55	22	22	13
289	Year-Round Residence	Non-Participating	570850.30	4752006.93	22	22	13
291	Year-Round Residence	Non-Participating	571014.88	4751970.46	22	22	13
284	Public	Non-Participating	570704.13	4752040.88	22	22	13
287	Year-Round Residence	Non-Participating	570809.45	4752018.40	22	22	13
290	Year-Round Residence	Non-Participating	570892.05	4751992.09	22	22	13
307	Year-Round Residence	Non-Participating	567099.23	4747774.79	22	22	10
382	Year-Round Residence	Non-Participating	572834.22	4749666.64	22	22	12
7	Year-Round Residence	Non-Participating	572330.47	4750641.72	22	22	14
49	Year-Round Residence	Non-Participating	568639.14	4747589.76	22	22	10
371	Year-Round Residence	Non-Participating	572843.77	4749757.31	22	22	12
372	Year-Round Residence	Non-Participating	572858.24	4749756.37	22	22	12
22	Year-Round Residence	Non-Participating	571684.32	4751002.03	22	22	14
48	Year-Round Residence	Non-Participating	568591.16	4747567.45	22	22	10
254	Year-Round Residence	Non-Participating	572532.80	4748449.56	22	22	11
322	Year-Round Residence	Non-Participating	567170.06	4747588.19	22	22	10
373	Year-Round Residence	Non-Participating	572872.27	4749754.77	22	22	12
377	Year-Round Residence	Non-Participating	572906.50	4749811.44	22	22	12
378	Year-Round Residence	Non-Participating	572904.14	4749826.69	22	22	12
381	Year-Round Residence	Non-Participating	572878.71	4749643.76	22	22	12
46	Year-Round Residence	Non-Participating	568550.20	4747544.78	21	21	10
126	Year-Round Residence	Non-Participating	572899.93	4749689.24	21	21	12
182	Year-Round Residence	Non-Participating	570648.56	4752117.38	21	21	13
374	Year-Round Residence	Non-Participating	572886.74	4749753.40	21	21	12
379	Year-Round Residence	Non-Participating	572909.71	4749859.26	21	21	12
380	Year-Round Residence	Non-Participating	572900.61	4749664.73	21	21	12
384	Year-Round Residence	Non-Participating	572913.11	4749843.02	21	21	12
97	Year-Round Residence	Non-Participating	568389.52	4747575.92	21	21	10
180	Year-Round Residence	Non-Participating	570631.53	4752070.08	21	21	13
375	Year-Round Residence	Non-Participating	572911.71	4749774.18	21	21	12
376	Year-Round Residence	Non-Participating	572905.99	4749797.03	21	21	12
44	Year-Round Residence	Non-Participating	568489.11	4747519.28	21	21	10
181	Public	Non-Participating	570640.26	4752158.08	21	21	12
259	Year-Round Residence	Non-Participating	572457.84	4748744.73	21	21	11
179	Public	Non-Participating	570594.72	4752115.73	21	21	12
185	Year-Round Residence	Non-Participating	570640.73	4752176.63	21	21	12
238	Year-Round Residence	Non-Participating	570649.57	4752189.59	21	21	12
114	Public	Non-Participating	572056.82	4750775.08	21	21	13
175	Public	Non-Participating	570590.39	4752068.13	21	21	13
188	Year-Round Residence	Non-Participating	570657.92	4752210.57	21	21	12
192	Public	Non-Participating	568362.74	4751682.34	21	21	10
239	Year-Round Residence	Non-Participating	570654.28	4752199.89	21	21	12
176	Year-Round Residence	Non-Participating	569810.04	4752510.27	21	21	13
178	Year-Round Residence	Non-Participating	570469.61	4752147.17	21	21	12

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
252	Year-Round Residence	Non-Participating	572393.50	4748198.39	21	21	11
20	Year-Round Residence	Non-Participating	568968.94	4751687.04	21	21	11
183	Year-Round Residence	Non-Participating	570664.18	4752131.94	21	21	12
248	Year-Round Residence	Non-Participating	571541.55	4748220.90	21	21	11
340	Public	Non-Participating	569982.69	4747395.09	21	21	10
184	Year-Round Residence	Non-Participating	570672.98	4752148.82	21	21	12
321	Year-Round Residence	Non-Participating	567019.43	4747556.38	21	21	9
160	Year-Round Residence	Non-Participating	569844.91	4752385.69	21	21	11
172	Year-Round Residence	Non-Participating	569879.13	4752379.87	21	21	11
186	Year-Round Residence	Non-Participating	570677.42	4752164.58	21	21	12
237	Public	Non-Participating	570159.50	4751921.17	21	21	12
296	Year-Round Residence	Non-Participating	572596.07	4750651.28	21	21	13
128	Year-Round Residence	Non-Participating	573037.69	4749750.94	21	21	11
240	Year-Round Residence	Non-Participating	570687.51	4752185.79	21	21	12
327	Year-Round Residence	Non-Participating	568602.98	4746920.16	21	21	9
19	Year-Round Residence	Non-Participating	568953.46	4751703.03	20	20	11
189	Year-Round Residence	Non-Participating	570668.98	4752220.50	20	20	12
212	Year-Round Residence	Non-Participating	570983.51	4747947.28	20	20	10
242	Year-Round Residence	Non-Participating	570806.77	4747367.86	20	20	10
251	Year-Round Residence	Non-Participating	571774.89	4748195.40	20	20	11
281	Year-Round Residence	Non-Participating	570677.59	4752235.20	20	20	12
241	Year-Round Residence	Non-Participating	570698.85	4752211.43	20	20	12
124	Public	Non-Participating	570968.78	4747357.96	20	20	10
194	Year-Round Residence	Non-Participating	570834.00	4747298.07	20	20	10
210	Year-Round Residence	Non-Participating	570959.39	4747906.86	20	20	10
8	Year-Round Residence	Non-Participating	572415.54	4750611.42	20	20	13
21	Unknown	Non-Participating	568839.30	4751716.12	20	20	10
162	Year-Round Residence	Non-Participating	568927.42	4752694.00	20	20	9
173	Public	Non-Participating	569542.00	4752016.12	20	20	11
256	Year-Round Residence	Non-Participating	572322.77	4748674.34	20	20	11
272	Year-Round Residence	Non-Participating	569066.40	4752719.39	20	20	9
283	Year-Round Residence	Non-Participating	570687.96	4752247.74	20	20	12
187	Year-Round Residence	Non-Participating	570712.67	4752229.46	20	20	12
328	Year-Round Residence	Non-Participating	568602.80	4746806.20	20	20	9
65	Year-Round Residence	Non-Participating	569082.07	4752771.90	20	20	9
246	Year-Round Residence	Non-Participating	570828.31	4747616.50	20	20	10
266	Year-Round Residence	Non-Participating	568986.07	4752652.27	20	20	9
270	Year-Round Residence	Non-Participating	569047.23	4752666.41	20	20	9
329	Year-Round Residence	Non-Participating	568733.82	4746784.15	20	20	9
43	Unknown	Non-Participating	568611.35	4747212.27	20	20	9
67	Year-Round Residence	Non-Participating	569092.69	4752804.29	20	20	9
235	Year-Round Residence	Non-Participating	569763.21	4752389.65	20	20	10
268	Year-Round Residence	Non-Participating	569018.22	4752677.46	20	20	9
101	Year-Round Residence	Non-Participating	569105.30	4752834.74	20	20	9
116	Year-Round Residence	Non-Participating	569040.58	4752804.64	20	20	9
166	Year-Round Residence	Non-Participating	568960.82	4752681.25	20	20	9
174	Year-Round Residence	Non-Participating	569297.82	4752760.00	20	20	9
232	Year-Round Residence	Non-Participating	569229.29	4752739.45	20	20	9
236	Public	Non-Participating	569927.13	4751691.92	20	20	12
119	Year-Round Residence	Non-Participating	567273.88	4751485.12	20	20	8
155	Year-Round Residence	Non-Participating	568847.75	4752692.33	20	20	9
177	Unknown	Non-Participating	569305.03	4752805.00	20	20	9
196	Year-Round Residence	Non-Participating	570720.66	4747177.49	20	20	9
250	Year-Round Residence	Non-Participating	572152.87	4748582.63	20	20	11
111	Year-Round Residence	Non-Participating	569058.22	4752858.04	19	19	9
117	Year-Round Residence	Non-Participating	567274.95	4751464.62	19	19	8
170	Year-Round Residence	Non-Participating	569255.59	4752648.98	19	19	9
244	Year-Round Residence	Non-Participating	570753.47	4747395.47	19	19	9
331	Year-Round Residence	Non-Participating	568649.05	4746694.51	19	19	8
2	Year-Round Residence	Non-Participating	569091.67	4751745.20	19	19	8
74	Year-Round Residence	Non-Participating	569075.15	4752458.60	19	19	9
4	Year-Round Residence	Non-Participating	568765.88	4751745.05	19	19	9
72	Year-Round Residence	Non-Participating	569017.46	4752535.02	19	19	9

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
73	Year-Round Residence	Non-Participating	569058.69	4752462.36	19	19	9
285	Year-Round Residence	Non-Participating	570701.89	4752256.18	19	19	11
308	Year-Round Residence	Non-Participating	567007.48	4747703.39	19	19	8
330	Year-Round Residence	Non-Participating	568379.26	4746530.30	19	19	8
5	Year-Round Residence	Non-Participating	571282.83	4751161.05	19	19	11
122	Year-Round Residence	Non-Participating	569012.08	4752481.96	19	19	9
123	Year-Round Residence	Non-Participating	569034.25	4752476.07	19	19	9
70	Year-Round Residence	Non-Participating	568984.15	4752538.61	19	19	9
121	Year-Round Residence	Non-Participating	568972.57	4752492.68	19	19	9
118	Year-Round Residence	Non-Participating	568941.24	4752495.21	19	19	9
286	Unknown	Non-Participating	570714.73	4752263.29	19	19	11
66	Year-Round Residence	Non-Participating	568907.64	4752505.78	19	19	9
262	Year-Round Residence	Non-Participating	567291.22	4751402.10	19	19	8
306	Year-Round Residence	Non-Participating	566979.42	4747637.85	19	19	7
10	Year-Round Residence	Non-Participating	573021.10	4750568.21	19	19	10
51	Year-Round Residence	Non-Participating	568847.72	4752520.66	19	19	8
56	Year-Round Residence	Non-Participating	568859.35	4752517.94	19	19	8
61	Year-Round Residence	Non-Participating	568875.55	4752518.54	19	19	8
332	Seasonal Residence	Non-Participating	568665.27	4746559.35	19	19	7
9	Year-Round Residence	Non-Participating	572979.30	4750586.96	19	19	10
68	Year-Round Residence	Non-Participating	568800.97	4752532.63	19	19	8
69	Year-Round Residence	Non-Participating	568815.67	4752529.72	19	19	8
130	Public	Non-Participating	573418.06	4749653.73	19	19	9
11	Year-Round Residence	Non-Participating	573062.52	4750545.30	18	18	10
273	Year-Round Residence	Non-Participating	568750.17	4752555.24	18	18	8
274	Year-Round Residence	Non-Participating	568719.06	4752557.98	18	18	8
279	Year-Round Residence	Non-Participating	570789.93	4752380.77	18	18	10
45	Year-Round Residence	Non-Participating	570790.46	4752329.08	18	18	10
58	Year-Round Residence	Non-Participating	568465.27	4752673.67	18	18	8
276	Year-Round Residence	Non-Participating	568702.37	4752563.05	18	18	8
277	Year-Round Residence	Non-Participating	568688.78	4752565.10	18	18	8
280	Year-Round Residence	Non-Participating	568658.45	4752576.57	18	18	8
53	Year-Round Residence	Non-Participating	568629.50	4752581.95	18	18	8
54	Year-Round Residence	Non-Participating	568612.37	4752587.89	18	18	8
60	Seasonal Residence	Non-Participating	568418.64	4752696.33	18	18	8
62	Seasonal Residence	Non-Participating	568398.88	4752701.37	18	18	8
255	Year-Round Residence	Non-Participating	570802.37	4752341.85	18	18	10
278	Year-Round Residence	Non-Participating	568673.40	4752570.61	18	18	8
333	Year-Round Residence	Non-Participating	568658.15	4746482.43	18	18	7
55	Year-Round Residence	Non-Participating	568576.83	4752594.95	18	18	8
57	Year-Round Residence	Non-Participating	568531.64	4752604.53	18	18	8
120	Year-Round Residence	Non-Participating	567750.08	4752130.74	18	18	7
271	Year-Round Residence	Non-Participating	570838.81	4752353.57	18	18	10
275	Year-Round Residence	Non-Participating	570837.96	4752436.24	18	18	10
25	Unknown	Non-Participating	573141.34	4750526.06	18	18	10
63	Year-Round Residence	Non-Participating	568369.11	4752701.07	18	18	7
129	Year-Round Residence	Non-Participating	573514.91	4749609.38	18	18	9
264	Year-Round Residence	Non-Participating	570820.38	4752315.64	18	18	9
314	Public	Non-Participating	573576.04	4749828.47	18	18	8
198	Year-Round Residence	Non-Participating	570403.64	4746898.30	18	18	7
200	Year-Round Residence	Non-Participating	570444.44	4746893.04	18	18	7
218	Public	Non-Participating	568075.89	4752556.37	18	18	7
320	Year-Round Residence	Non-Participating	566847.98	4747795.26	18	18	6
208	Year-Round Residence	Non-Participating	570306.53	4746795.57	18	18	7
334	Year-Round Residence	Non-Participating	569416.12	4746629.33	18	18	7
339	Year-Round Residence	Non-Participating	570502.82	4746733.69	17	17	7
202	Year-Round Residence	Non-Participating	570544.19	4746908.91	17	17	6
92	Public	Non-Participating	567848.44	4752102.04	17	17	7
204	Unknown	Non-Participating	570640.92	4746963.17	17	17	7
229	Unknown	Non-Participating	568222.99	4752734.08	17	17	7
338	Year-Round Residence	Non-Participating	570214.03	4746605.64	17	17	6
341	Public	Non-Participating	570636.02	4746880.89	17	17	7
342	Seasonal Residence	Non-Participating	570631.08	4746914.46	17	17	7

Table F-1.1: Annual Sound Level Modeling Results at Discrete Points - Sorted by Sound Level

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only L10, Outside (dBA)	Project Only L50, Outside (dBA)	Project Only LEQ, night, Outside (dBA)
			X (m)	Y (m)			
80	Year-Round Residence	Non-Participating	573433.33	4750244.45	17	17	8
205	Year-Round Residence	Non-Participating	570673.58	4746983.15	17	17	7
335	Year-Round Residence	Non-Participating	569383.86	4746504.34	17	17	6
343	Year-Round Residence	Non-Participating	570677.55	4746933.28	17	17	7
79	Year-Round Residence	Non-Participating	573380.58	4750282.73	17	17	9
304	Year-Round Residence	Non-Participating	566802.31	4748189.24	17	17	6
337	Year-Round Residence	Non-Participating	570085.96	4746487.53	17	17	6
336	Seasonal Residence	Non-Participating	569777.18	4746578.72	17	17	6
344	Year-Round Residence	Non-Participating	570748.93	4746980.95	17	17	6
305	Year-Round Residence	Non-Participating	566642.20	4748163.67	16	16	5
345	Year-Round Residence	Non-Participating	570882.06	4747052.83	14	14	3

Appendix G
Total Future Sound Levels

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
1	569876.41	4751052.94	5
2	569091.67	4751745.20	5
3	568943.15	4751628.92	5
4	568765.88	4751745.05	5
5	571282.83	4751161.05	1
6	571504.09	4751087.43	1
7	572330.47	4750641.72	4
8	572415.54	4750611.42	4
9	572979.30	4750586.96	4
10	573021.10	4750568.21	4
11	573062.52	4750545.30	4
12	569524.01	4750447.60	5
13	569470.27	4750326.39	5
14	569440.20	4750949.47	5
15	569657.94	4751219.48	5
16	569637.22	4751255.05	5
17	569616.81	4751281.68	5
18	569001.55	4751753.69	5
19	568953.46	4751703.03	5
20	568968.94	4751687.04	5
21	568839.30	4751716.12	5
22	571684.32	4751002.03	1
23	571711.42	4750985.73	1
24	571751.21	4750950.58	1
25	573141.34	4750526.06	4
26	572327.57	4749300.33	4
27	572084.90	4749382.45	4
28	569441.95	4748878.66	3
29	572033.45	4749443.89	4
30	568264.94	4750086.08	5
31	572177.45	4749579.83	4
32	569446.59	4748766.97	3
33	571797.79	4749526.97	4
34	571947.48	4749538.14	4
35	569111.71	4748348.90	3
36	572064.46	4749493.97	4
37	570876.79	4749847.02	1
38	570986.36	4749841.17	1
39	568959.03	4748022.54	3
40	570421.97	4749520.25	2
41	569669.89	4749038.11	3
42	567888.53	4749797.92	5
43	568611.35	4747212.27	3
44	568489.11	4747519.28	3
45	570790.46	4752329.08	5
46	568550.20	4747544.78	3
47	567865.22	4749673.74	5

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
48	568591.16	4747567.45	3
49	568639.14	4747589.76	3
50	571277.88	4749688.74	1
51	568847.72	4752520.66	5
52	571154.45	4749594.94	1
53	568629.50	4752581.95	5
54	568612.37	4752587.89	5
55	568576.83	4752594.95	5
56	568859.35	4752517.94	5
57	568531.64	4752604.53	5
58	568465.27	4752673.67	5
59	572321.59	4751532.72	1
60	568418.64	4752696.33	5
61	568875.55	4752518.54	5
62	568398.88	4752701.37	5
63	568369.11	4752701.07	5
64	570913.76	4751988.61	5
65	569082.07	4752771.90	5
66	568907.64	4752505.78	5
67	569092.69	4752804.29	5
68	568800.97	4752532.63	5
69	568815.67	4752529.72	5
70	568984.15	4752538.61	5
71	570930.65	4751985.07	5
72	569017.46	4752535.02	5
73	569058.69	4752462.36	5
74	569075.15	4752458.60	5
75	572032.87	4751754.39	1
76	570962.92	4751977.55	5
77	570980.50	4751971.19	5
78	571987.72	4751800.17	1
79	573380.58	4750282.73	4
80	573433.33	4750244.45	4
81	571701.79	4749407.25	4
82	572571.58	4749673.02	4
83	570739.32	4749840.37	1
84	569760.25	4749026.80	3
85	570902.01	4749780.07	1
86	570457.76	4749533.71	2
87	568144.54	4749953.20	5
88	569631.58	4749014.15	3
89	569415.06	4748678.47	3
90	569428.11	4747994.95	3
91	568048.14	4749868.45	5
92	567848.44	4752102.04	5
93	569022.44	4748078.18	3
94	568051.46	4749798.66	5

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
95	568728.69	4747747.82	3
96	568585.66	4747680.03	3
97	568389.52	4747575.92	3
98	569590.18	4747825.90	3
99	568171.18	4749475.13	5
100	569612.16	4747904.70	3
101	569105.30	4752834.74	5
102	570176.10	4748800.96	3
103	568269.88	4749416.75	5
104	570501.36	4748524.92	3
105	570370.25	4748493.89	3
106	570443.52	4748526.07	3
107	568324.87	4749349.20	5
108	571050.00	4749359.91	1
109	570804.68	4750125.53	1
110	568509.97	4749412.15	2
111	569058.22	4752858.04	5
112	568490.94	4749300.23	2
113	568448.25	4749188.07	2
114	572056.82	4750775.08	4
115	568520.71	4749125.93	3
116	569040.58	4752804.64	5
117	567274.95	4751464.62	5
118	568941.24	4752495.21	5
119	567273.88	4751485.12	5
120	567750.08	4752130.74	5
121	568972.57	4752492.68	5
122	569012.08	4752481.96	5
123	569034.25	4752476.07	5
124	570968.78	4747357.96	3
125	572739.97	4749821.10	4
126	572899.93	4749689.24	4
127	569386.40	4748827.47	3
128	573037.69	4749750.94	4
129	573514.91	4749609.38	4
130	573418.06	4749653.73	4
131	569204.55	4748614.37	3
132	572071.13	4749860.32	4
133	572150.30	4749829.72	4
134	567898.75	4749472.43	5
135	572163.98	4749694.57	4
136	570761.86	4750201.02	1
137	572108.67	4749706.21	4
138	571317.50	4750220.80	1
139	571168.68	4750042.07	1
140	570699.66	4750286.79	1
141	571140.33	4749988.53	1

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
142	571087.93	4749888.48	1
143	571206.87	4749823.38	1
144	570354.70	4750012.67	1
145	571349.13	4749789.94	1
146	570965.96	4749992.84	1
147	567692.70	4749312.40	5
148	571002.35	4749946.95	1
149	568587.91	4750965.35	5
150	570747.24	4749752.29	1
151	570295.34	4749481.41	2
152	569899.10	4749419.76	2
153	568569.87	4750842.99	5
154	569564.70	4748956.73	3
155	568847.75	4752692.33	5
156	568273.23	4750195.92	5
157	567640.59	4749265.62	5
158	568312.30	4750143.06	5
159	567594.38	4749243.34	5
160	569844.91	4752385.69	5
161	567558.69	4749219.42	5
162	568927.42	4752694.00	5
163	567887.61	4748293.78	3
164	567829.18	4750072.95	5
165	567854.41	4750001.63	5
166	568960.82	4752681.25	5
167	567793.49	4749961.75	5
168	567758.90	4750004.18	5
169	567731.07	4750072.42	5
170	569255.59	4752648.98	5
171	567585.78	4750216.32	5
172	569879.13	4752379.87	5
173	569542.00	4752016.12	5
174	569297.82	4752760.00	5
175	570590.39	4752068.13	5
176	569810.04	4752510.27	5
177	569305.03	4752805.00	5
178	570469.61	4752147.17	5
179	570594.72	4752115.73	5
180	570631.53	4752070.08	5
181	570640.26	4752158.08	5
182	570648.56	4752117.38	5
183	570664.18	4752131.94	5
184	570672.98	4752148.82	5
185	570640.73	4752176.63	5
186	570677.42	4752164.58	5
187	570712.67	4752229.46	5
188	570657.92	4752210.57	5

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
189	570668.98	4752220.50	5
190	571232.55	4750542.16	1
191	571608.56	4750951.03	1
192	568362.74	4751682.34	5
193	567744.91	4750167.70	5
194	570834.00	4747298.07	3
195	571253.37	4750153.80	1
196	570720.66	4747177.49	3
197	571131.83	4750132.46	1
198	570403.64	4746898.30	3
199	569257.69	4748905.61	3
200	570444.44	4746893.04	3
201	570673.93	4749725.35	1
202	570544.19	4746908.91	3
203	570325.87	4749494.82	2
204	570640.92	4746963.17	3
205	570673.58	4746983.15	3
206	569803.88	4749130.26	3
207	569146.41	4748470.60	3
208	570306.53	4746795.57	3
209	567872.58	4749460.82	5
210	570959.39	4747906.86	3
211	569091.23	4748469.17	3
212	570983.51	4747947.28	3
213	569004.26	4748579.18	3
214	570873.11	4748201.08	3
215	570837.62	4748244.37	3
216	567898.40	4749374.66	5
217	570554.00	4750310.61	1
218	568075.89	4752556.37	5
219	570843.09	4750478.54	1
220	567915.86	4749336.42	5
221	570539.58	4750606.34	1
222	570500.38	4750670.52	1
223	567944.57	4749268.18	5
224	568375.18	4750338.33	5
225	567779.76	4749367.81	5
226	567703.11	4749411.58	5
227	567437.83	4749126.57	5
228	567395.20	4749095.60	5
229	568222.99	4752734.08	5
230	567865.85	4748367.78	3
231	567605.57	4750119.19	5
232	569229.29	4752739.45	5
233	567334.37	4750574.31	5
234	567305.82	4750627.27	5
235	569763.21	4752389.65	5

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
236	569927.13	4751691.92	5
237	570159.50	4751921.17	5
238	570649.57	4752189.59	5
239	570654.28	4752199.89	5
240	570687.51	4752185.79	5
241	570698.85	4752211.43	5
242	570806.77	4747367.86	3
243	570876.81	4750015.49	1
244	570753.47	4747395.47	3
245	570611.42	4749669.71	2
246	570828.31	4747616.50	3
247	569293.04	4748701.69	3
248	571541.55	4748220.90	4
249	570373.87	4749512.77	2
250	572152.87	4748582.63	4
251	571774.89	4748195.40	4
252	572393.50	4748198.39	4
253	569728.11	4749085.84	3
254	572532.80	4748449.56	4
255	570802.37	4752341.85	5
256	572322.77	4748674.34	4
257	572474.99	4748945.70	4
258	568697.55	4748407.61	3
259	572457.84	4748744.73	4
260	572537.36	4749013.58	4
261	572277.40	4749489.23	4
262	567291.22	4751402.10	5
263	572359.76	4749488.35	4
264	570820.38	4752315.64	5
265	572476.37	4749562.90	4
266	568986.07	4752652.27	5
267	572129.12	4749426.56	4
268	569018.22	4752677.46	5
269	571413.35	4751717.60	1
270	569047.23	4752666.41	5
271	570838.81	4752353.57	5
272	569066.40	4752719.39	5
273	568750.17	4752555.24	5
274	568719.06	4752557.98	5
275	570837.96	4752436.24	5
276	568702.37	4752563.05	5
277	568688.78	4752565.10	5
278	568673.40	4752570.61	5
279	570789.93	4752380.77	5
280	568658.45	4752576.57	5
281	570677.59	4752235.20	5
282	571376.84	4751734.24	1

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
283	570687.96	4752247.74	5
284	570704.13	4752040.88	5
285	570701.89	4752256.18	5
286	570714.73	4752263.29	5
287	570809.45	4752018.40	5
288	571340.99	4751749.35	1
289	570850.30	4752006.93	5
290	570892.05	4751992.09	5
291	571014.88	4751970.46	5
292	571111.42	4751908.19	1
293	571304.34	4751778.21	1
294	571678.99	4751671.07	1
295	571547.10	4751180.35	1
296	572596.07	4750651.28	4
297	568443.92	4750372.68	5
298	568483.01	4750427.62	5
299	566688.38	4749344.81	5
300	566763.25	4749325.90	5
301	567163.35	4748887.86	3
302	567069.27	4748853.77	3
303	567059.75	4748700.62	3
304	566802.31	4748189.24	3
305	566642.20	4748163.67	3
306	566979.42	4747637.85	3
307	567099.23	4747774.79	3
308	567007.48	4747703.39	3
309	567351.84	4747727.92	3
310	567421.37	4747741.92	3
311	567709.57	4747729.47	3
312	568056.79	4747559.37	3
313	568143.55	4747492.78	3
314	573576.04	4749828.47	4
315	568602.80	4750580.02	5
316	566729.96	4749483.57	5
317	567279.52	4749013.61	3
318	567234.84	4748990.48	3
319	566706.31	4748690.52	3
320	566847.98	4747795.26	3
321	567019.43	4747556.38	3
322	567170.06	4747588.19	3
323	567591.57	4747854.92	3
324	567724.99	4748032.16	3
325	567924.69	4748484.41	3
326	567832.72	4747643.38	3
327	568602.98	4746920.16	3
328	568602.80	4746806.20	3
329	568733.82	4746784.15	3

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
330	568379.26	4746530.30	3
331	568649.05	4746694.51	3
332	568665.27	4746559.35	3
333	568658.15	4746482.43	3
334	569416.12	4746629.33	3
335	569383.86	4746504.34	3
336	569777.18	4746578.72	3
337	570085.96	4746487.53	3
338	570214.03	4746605.64	3
339	570502.82	4746733.69	3
340	569982.69	4747395.09	3
341	570636.02	4746880.89	3
342	570631.08	4746914.46	3
343	570677.55	4746933.28	3
344	570748.93	4746980.95	3
345	570882.06	4747052.83	3
346	570231.70	4748743.29	3
347	571142.46	4749860.37	1
348	571902.73	4748867.86	4
349	570990.46	4750073.71	1
350	570483.09	4750708.69	5
351	569936.19	4750675.83	5
352	569906.93	4751111.13	5
353	572130.00	4749927.83	4
354	572347.74	4749587.53	4
355	572388.99	4749601.27	4
356	572377.93	4749674.04	4
357	572403.52	4749657.29	4
358	572449.88	4749684.62	4
359	572422.83	4749715.98	4
360	572774.46	4749767.27	4
361	572717.98	4749764.92	4
362	572682.80	4749798.81	4
363	572762.62	4749789.18	4
364	572791.18	4749801.92	4
365	572751.22	4749831.40	4
366	572816.05	4749852.16	4
367	572803.74	4749814.71	4
368	572719.20	4749814.91	4
369	572700.86	4749809.70	4
370	572772.84	4749837.95	4
371	572843.77	4749757.31	4
372	572858.24	4749756.37	4
373	572872.27	4749754.77	4
374	572886.74	4749753.40	4
375	572911.71	4749774.18	4
376	572905.99	4749797.03	4

Table G-1: Assignment of Measurement Locations to Modeling Locations

Modeling Receptor ID	Coordinates UTM NAD83 Zone 18N (meters)		Assigned Measurement Location ID #
	X (m)	Y (m)	
377	572906.50	4749811.44	4
378	572904.14	4749826.69	4
379	572909.71	4749859.26	4
380	572900.61	4749664.73	4
381	572878.71	4749643.76	4
382	572834.22	4749666.64	4
383	572739.37	4749725.08	4
384	572913.11	4749843.02	4
385	567635.09	4747727.54	3
386	566901.78	4748735.92	3
387	567027.75	4749137.63	5
388	566845.68	4749079.73	5
389	566757.05	4749026.28	5

Table G-2: Long-Term Future Total Sound Levels

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Ambient Daytime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Daytime Noise Level[1,2] (dBA)	Ambient Summer Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Summer Nighttime Noise Level[3,4] (dBA)	Ambient Winter Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Winter Nighttime Noise Level[5,6] (dBA)	Ambient Daytime Average LEQ (dBA, ANS Filtered)	Project Only Annual L50 (dBA)	Typical Project Daytime Noise Level[7,8] (dBA)
			X (m)	Y (m)												
1	Year-Round Residence	Non-Participating	569876.41	4751052.94	35	27	36	33	27	34	36	27	37	50	27	50
2	Year-Round Residence	Non-Participating	569091.67	4751745.20	35	19	35	33	19	33	36	19	36	50	27	50
3	Unknown	Non-Participating	568943.15	4751628.92	35	24	35	33	24	34	36	24	36	50	27	50
4	Year-Round Residence	Non-Participating	568765.88	4751745.05	35	19	35	33	19	33	36	19	36	50	27	50
5	Year-Round Residence	Non-Participating	571282.83	4751161.05	45	19	45	39	19	39	40	19	40	55	27	55
6	Year-Round Residence	Non-Participating	571504.09	4751087.43	45	22	45	39	22	39	40	22	40	55	27	55
7	Year-Round Residence	Non-Participating	572330.47	4750641.72	34	22	34	31	22	31	34	22	35	53	27	53
8	Year-Round Residence	Non-Participating	572415.54	4750611.42	34	20	34	31	20	31	34	20	34	53	27	53
9	Year-Round Residence	Non-Participating	572979.30	4750586.96	34	19	34	31	19	31	34	19	34	53	27	53
10	Year-Round Residence	Non-Participating	573021.10	4750568.21	34	19	34	31	19	31	34	19	34	53	27	53
11	Year-Round Residence	Non-Participating	573062.52	4750545.30	34	18	34	31	18	31	34	18	34	53	27	53
12	Year-Round Residence	Non-Participating	569524.01	4750447.60	35	40	41	33	40	41	36	40	42	50	27	50
13	Year-Round Residence	Participating	569470.27	4750326.39	35	44	44	33	44	44	36	44	44	50	27	50
14	Year-Round Residence	Non-Participating	569440.20	4750949.47	35	35	38	33	35	37	36	35	39	50	27	50
15	Year-Round Residence	Non-Participating	569657.94	4751219.48	35	24	35	33	24	33	36	24	36	50	27	50
16	Year-Round Residence	Non-Participating	569637.22	4751255.05	35	24	35	33	24	34	36	24	36	50	27	50
17	Year-Round Residence	Non-Participating	569616.81	4751281.68	35	24	35	33	24	34	36	24	36	50	27	50
18	Year-Round Residence	Non-Participating	569001.55	4751753.69	35	22	35	33	22	33	36	22	36	50	27	50
19	Year-Round Residence	Non-Participating	568953.46	4751703.03	35	20	35	33	20	33	36	20	36	50	27	50
20	Year-Round Residence	Non-Participating	568968.94	4751687.04	35	21	35	33	21	33	36	21	36	50	27	50
21	Unknown	Non-Participating	568839.30	4751716.12	35	20	35	33	20	33	36	20	36	50	27	50
22	Year-Round Residence	Non-Participating	571684.32	4751002.03	45	22	45	39	22	39	40	22	40	55	27	55
23	Year-Round Residence	Non-Participating	571711.42	4750985.73	45	22	45	39	22	39	40	22	40	55	27	55
24	Unknown	Non-Participating	571751.21	4750950.58	45	22	45	39	22	39	40	22	40	55	27	55
25	Unknown	Non-Participating	573141.34	4750526.06	34	18	34	31	18	31	34	18	34	53	27	53
26	Year-Round Residence	Non-Participating	572327.57	4749300.33	34	28	35	31	28	33	34	28	35	53	27	53
27	Year-Round Residence	Non-Participating	572084.90	4749382.45	34	38	39	31	38	39	34	38	39	53	27	53
28	Year-Round Residence	Non-Participating	569441.95	4748878.66	26	40	40	25	40	40	27	40	40	49	27	49
29	Year-Round Residence	Non-Participating	572033.45	4749443.89	34	38	39	31	38	39	34	38	40	53	27	53
30	Unknown	Non-Participating	568264.94	4750086.08	35	34	37	33	34	36	36	34	38	50	27	50
31	Year-Round Residence	Non-Participating	572177.45	4749579.83	34	34	37	31	34	36	34	34	37	53	27	53
32	Year-Round Residence	Non-Participating	569446.59	4748766.97	26	41	41	25	41	41	27	41	41	49	27	49
33	Unknown	Participating	571797.79	4749526.97	34	39	40	31	39	40	34	39	40	53	27	53
34	Year-Round Residence	Non-Participating	571947.48	4749538.14	34	38	39	31	38	38	34	38	39	53	27	53
35	Year-Round Residence	Non-Participating	569111.71	4748348.90	26	30	31	25	30	31	27	30	32	49	27	49
36	Year-Round Residence	Non-Participating	572064.46	4749493.97	34	37	38	31	37	38	34	37	39	53	27	53
37	Year-Round Residence	Non-Participating	570876.79	4749847.02	45	37	45	39	37	41	40	37	42	55	27	55
38	Year-Round Residence	Non-Participating	570986.36	4749841.17	45	37	45	39	37	41	40	37	42	55	27	55
39	Year-Round Residence	Non-Participating	568959.03	4748022.54	26	27	30	25	27	29	27	27	30	49	27	49
40	Year-Round Residence	Non-Participating	570421.97	4749520.25	30	36	37	27	36	37	31	36	37	52	27	52
41	Year-Round Residence	Non-Participating	569669.89	4749038.11	26	40	41	25	40	41	27	40	41	49	27	49
42	Year-Round Residence	Non-Participating	567888.53	4749797.92	35	30	36	33	30	35	36	30	37	50	27	50
43	Unknown	Non-Participating	568611.35	4747212.27	26	20	27	25	20	26	27	20	28	49	27	49
44	Year-Round Residence	Non-Participating	568489.11	4747519.28	26	21	27	25	21	27	27	21	28	49	27	49
45	Year-Round Residence	Non-Participating	570790.46	4752329.08	35	18	35	33	18	33	36	18	36	50	27	50
46	Year-Round Residence	Non-Participating	568550.20	4747544.78	26	21	27	25	21	27	27	21	28	49	27	49
47	Year-Round Residence	Non-Participating	567865.22	4749673.74	35	29	36	33	29	35	36	29	37	50	27	50
48	Year-Round Residence	Non-Participating	568591.16	4747567.45	26	22	27	25	22	27	27	22	28	49	27	49
49	Year-Round Residence	Non-Participating	568639.14	4747589.76	26	22	27	25	22	27	27	22	28	49	27	49
50	Year-Round Residence	Non-Participating	571277.88	4749688.74	45	41	46	39	41	43	40	41	44	55	27	55
51	Year-Round Residence	Non-Participating	568847.72	4752520.66	35	19	35	33	19	33	36	19	36	50	27	50
52	Year-Round Residence	Non-Participating	571154.45	4749594.94	45	40	46	39	40	42	40	40	43	55	27	55
53	Year-Round Residence	Non-Participating	568629.50	4752581.95	35	18	35	33	18	33	36	18	36	50	27	50
54	Year-Round Residence	Non-Participating	568612.37	4752587.89	35	18	35	33	18	33	36	18	36	50	27	50
55	Year-Round Residence	Non-Participating	568576.83	4752594.95	35	18	35	33	18	33	36	18	36	50	27	50
56	Year-Round Residence	Non-Participating	568859.35	4752517.94	35	19	35	33	19	33	36	19	36	50	27	50
57	Year-Round Residence	Non-Participating	568531.64	4752604.53	35	18	35	33	18	33	36	18	36	50	27	50
58	Year-Round Residence	Non-Participating	568465.27	4752673.67	35	18	35	33	18	33	36	18	36	50	27	50
59	Year-Round Residence	Non-Participating	572321.59	4751532.72	45	24	45	39	24	39	40	24	40	55	27	55
60	Seasonal Residence	Non-Participating	568418.64	4752696.33	35	18	35	33	18	33	36	18	36	50	27	50
61	Year-Round Residence	Non-Participating	568875.55	4752518.54	35	19	35	33	19	33	36	19	36	50	27	50
62	Seasonal Residence	Non-Participating	568398.88	4752701.37	35	18	35	33	18	33	36	18	36	50	27	50
63	Year-Round Residence	Non-Participating	568369.11	4752701.07	35	18	35	33	18	33	36	18	36	50	27	50
64	Year-Round Residence	Non-Participating	570913.76	4751988.61	35	22	35	33	22	33	36	22	36	50	27	50
65	Year-Round Residence	Non-Participating	569082.07	4752771.90	35	20	35	33	20	33	36	20	36	50	27	50
66	Year-Round Residence	Non-Participating	568907.64	4752505.78	35	19	35	33	19	33	36	19	36	50	27	50
67	Year-Round Residence	Non-Participating	569092.69	4752804.29	35	20	35	33	20	33	36	20	36	50	27	50
68	Year-Round Residence	Non-Participating	568800.97	4752532.63	35	19	35	33	19	33	36	19	36	50	27	50
69	Year-Round Residence	Non-Participating	568815.67	4752529.72	35	19	35	33	19	33	36	19	36	50	27	50
70	Year-Round Residence	Non-Participating	568984.15	4752538.61	35	19	35	33	19	33	36	19	36	50	27	50
71	Year-Round Residence	Non-Participating	570930.65	4751985.07	35	22	35	33	22	33	36	22	36	50	27	50
72	Year-Round Residence	Non-Participating	569017.46	4752535.02	35	19	35	33	19	33	36	19	36	50	27	50
73	Year-Round Residence	Non-Participating	569058.69	4752462.36	35	19	35	33	19	33	36	19	36	50	27	50
74	Year-Round Residence	Non-Participating	569075.15	4752458.60	35	19	35	33	19	33	36	19	36	50	27	50
75	Year-Round Residence	Non-Participating	572032.87	4751754.39	45	23	45	39	23	39	40	23	40	55	27	55
76	Year-Round Residence	Non-Participating	570962.92	4751977.55	35	22	35	33	22	33	36	22	36	50	27	50
77	Year-Round Residence	Non-Participating	570980.50	4751971.19	35	22	35	33	22	33	36	22	36	50	27	50
78	Unknown	Non-Participating	571987.72	4751800.17	45	23	45	39	23	39	40	23	40	55	27	55
79	Year-Round Residence	Non-Participating	573380.58	4750282.73	34	17	34	31	17	31	34	17	34	53	27	53
80	Year-Round Residence	Non-Participating	573433.33	4750244.45	34	17	34	31	17	31	34	17	34	53	27	53
81	Year-Round Residence	Non-Participating	571701.79	4749407.25	34	42	42	31	42	42	34	42	42	53	27	53
82	Year-Round Residence	Non-Participating	572571.58	4749673.02	34	24	34	31	24	32	34	24	35	53	27	53
83	Year-Round Residence	Non-Participating	570739.32	4749840.37	45	35	45	39	35	41	40	35	41	55	27	55
84	Unknown	Participating	569760.25	4749026.80	26	43	43	25	43	43	27	43	43	49	27	49
85	Year-Round Residence	Non-Participating	570902.01	4749780.07	45	35	45	39	35	41	40	35	41	55	27	55
86	Year-Round Residence	Non-Participating	570457.76	4749533.71	30	36	37	27	36	37	31	36	37	52	27	52
87	Year-Round Residence	Non-Participating	568144.54	4749953.20	35	32	37	33	32	36	36	32	38	50	27	50
88	Year-Round Residence	Non-Participating	569631.58	4749014.15	26	40	40	25	40	40	27	40	40	49	27	49
89	Year-Round Residence	Non-Participating	569415.06	4748678.47	26	39	39	25	39	39	27	39	39	49	27	49
90	Year-Round Residence	Non-Participating	569428.11	4747994.95	26	31	32	25	31	32	27	31	32	49	27	49
91	Year-Round Residence	Non-Participating	568048.14	4749868.45	35	31	36	33	31	35	36	31	37	50	27	50
92	Public	Non-Participating	567848.44	4752102.04	35	17	35	33	17	33	36	17	36	50	27	50
93	Year-Round Residence	Non-Participating	569022.44	4748078.18	26	28	30	25	28	30	27	28	30	49	27	49
94	Year-Round Residence	Non-Participating	568051.46	4749798.66	35	26	36	33	26	34	36	26	37	50	27	50
95	Year-Round Residence	Non-Participating	568728.69	4747747.82	26	27	30	25	27	29	27	27	30	49	27	49
96	Year-Round Residence	Non-Participating	568585.66	4747680.03	26	26	29	25	26	29	27	26	30	49	27	49
97	Year-Round Residence	Non-Participating	568389.52	4747575.92	26	21	27	25	21	27	27	21	28	49	27	49
98	Public	Non-Participating	569590.18	4747825.90	26	27	29	25	27	29	27	27	30	49	27	49
99	Public	Non-Participating	568171.18	4749475.13	35	32	37	33	32	36	36	32	38	50	27	50
100	Public	Non-Participating	569612.16	4747904.70	26	30	31	25	30	31	27	30	31	49	27	49
101	Year-Round Residence	Non-Participating	569105.30	4752834.74	35	20	35	33	20	33	36	20	36	50	27	50
102	Public	Participating	570176.10	4748800.96	26	40	40	25	40	40	27	40	40	49	27	49
103	Year-Round Residence	Non-Participating	568269.88	4749416.75	35	33	37	33	33	36	36	33	38	50	27	50
104	Year-Round Residence	Non-Participating	570501.36	4748524.92	26	31	32	25	31	32	27	31	32	49	27	49
105	Public	Non-Participating	570370.25	4748493.89	26	38	38	25	38	38	27	38	38	49	27	49
106	Public	Non-Participating	570443.52	4748526.07	26	32	33	25	32	33	27	32	33	49	27	49
107	Year-Round Residence	Non-Participating	568324.87	4749349.20	35	34	38	33	34	36	36	34	38	50	27	50
108	Public	Participating	571050.00	4749359.91	45	42	47	39	42	44	40	42	44	55	27	55
109	Year-Round Residence	Non-Participating	570804.68	4750125.53	45	39	46	39	39	42	40	39	43	55	27	55
110	Year-Round Residence	Non-Participating	568509.97	4749412.15	30	35	36	27	35	36	31	35	36	52	27	52
111	Year-Round Residence	Non-Participating	569058.22	4752858.04	35	19	35	33	19	33	36	19	36	50	27	50
112	Year-Round Residence	Non-Participating	568490.94	4749300.23	30	35	36	27	35	36	31	35	37	52	27	52

Table G-2: Long-Term Future Total Sound Levels

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Ambient Daytime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Daytime Noise Level[1,2] (dBA)	Ambient Summer Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Summer Nighttime Noise Level[3,4] (dBA)	Ambient Winter Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Winter Nighttime Noise Level[5,6] (dBA)	Ambient Daytime Average LEQ (dBA, ANS Filtered)	Project Only Annual L50 (dBA)	Typical Project Daytime Noise Level[7,8] (dBA)
			X (m)	Y (m)												
113	Year-Round Residence	Non-Participating	568448.25	4749188.07	30	36	37	27	36	36	31	36	37	52	27	52
114	Public	Non-Participating	572056.82	4750775.08	34	21	34	31	21	31	34	21	34	53	27	53
115	Year-Round Residence	Non-Participating	568520.71	4749125.93	26	36	37	25	36	37	27	36	37	49	27	49
116	Year-Round Residence	Non-Participating	569040.58	4752804.64	35	20	35	33	20	33	36	20	36	50	27	50
117	Year-Round Residence	Non-Participating	567274.95	4751464.62	35	19	35	33	19	33	36	19	36	50	27	50
118	Year-Round Residence	Non-Participating	568941.24	4752495.21	35	19	35	33	19	33	36	19	36	50	27	50
119	Year-Round Residence	Non-Participating	567273.88	4751485.12	35	20	35	33	20	33	36	20	36	50	27	50
120	Year-Round Residence	Non-Participating	567750.08	4752130.74	35	18	35	33	18	33	36	18	36	50	27	50
121	Year-Round Residence	Non-Participating	568972.57	4752492.68	35	19	35	33	19	33	36	19	36	50	27	50
122	Year-Round Residence	Non-Participating	569012.08	4752481.96	35	19	35	33	19	33	36	19	36	50	27	50
123	Year-Round Residence	Non-Participating	569034.25	4752476.07	35	19	35	33	19	33	36	19	36	50	27	50
124	Public	Non-Participating	570968.78	4747357.96	26	20	27	25	20	26	27	20	28	49	27	49
125	Year-Round Residence	Non-Participating	572739.97	4749821.10	34	22	34	31	22	31	34	22	35	53	27	53
126	Year-Round Residence	Non-Participating	572899.93	4749689.24	34	21	34	31	21	31	34	21	35	53	27	53
127	Public	Non-Participating	569386.40	4748827.47	26	39	39	25	39	39	27	39	39	49	27	49
128	Year-Round Residence	Non-Participating	573037.69	4749750.94	34	21	34	31	21	31	34	21	34	53	27	53
129	Year-Round Residence	Non-Participating	573514.91	4749609.38	34	18	34	31	18	31	34	18	34	53	27	53
130	Public	Non-Participating	573418.06	4749653.73	34	19	34	31	19	31	34	19	34	53	27	53
131	Year-Round Residence	Non-Participating	569204.55	4748614.37	26	33	34	25	33	34	27	33	34	49	27	49
132	Year-Round Residence	Non-Participating	572071.13	4749860.32	34	30	35	31	30	33	34	30	36	53	27	53
133	Year-Round Residence	Non-Participating	572150.30	4749829.72	34	29	35	31	29	33	34	29	35	53	27	53
134	Year-Round Residence	Non-Participating	567898.75	4749472.43	35	29	36	33	29	35	36	29	37	50	27	50
135	Year-Round Residence	Non-Participating	572163.98	4749694.57	34	32	36	31	32	35	34	32	36	53	27	53
136	Year-Round Residence	Non-Participating	570761.86	4750201.02	45	40	46	39	40	42	40	40	43	55	27	55
137	Unknown	Non-Participating	572108.67	4749706.21	34	32	36	31	32	34	34	32	36	53	27	53
138	Year-Round Residence	Non-Participating	571317.50	4750220.80	45	39	46	39	39	42	40	39	43	55	27	55
139	Year-Round Residence	Non-Participating	571168.68	4750042.07	45	39	46	39	39	42	40	39	42	55	27	55
140	Year-Round Residence	Non-Participating	570699.66	4750286.79	45	39	46	39	39	42	40	39	42	55	27	55
141	Year-Round Residence	Non-Participating	571140.33	4749988.53	45	38	46	39	38	42	40	38	42	55	27	55
142	Year-Round Residence	Non-Participating	571087.93	4749888.48	45	37	46	39	37	41	40	37	42	55	27	55
143	Year-Round Residence	Non-Participating	571206.87	4749823.38	45	39	46	39	39	42	40	39	42	55	27	55
144	Public	Participating	570354.70	4750012.67	45	37	45	39	37	41	40	37	42	55	27	55
145	Year-Round Residence	Non-Participating	571349.13	4749789.94	45	41	46	39	41	43	40	41	43	55	27	55
146	Year-Round Residence	Non-Participating	570965.96	4749992.84	45	38	46	39	38	42	40	38	42	55	27	55
147	Year-Round Residence	Non-Participating	567692.70	4749312.40	35	29	36	33	29	34	36	29	37	50	27	50
148	Year-Round Residence	Non-Participating	571002.35	4749946.95	45	38	46	39	38	42	40	38	42	55	27	55
149	Year-Round Residence	Non-Participating	568587.91	4750965.35	35	32	37	33	32	35	36	32	37	50	27	50
150	Year-Round Residence	Non-Participating	570747.24	4749752.29	45	35	45	39	35	41	40	35	41	55	27	55
151	Year-Round Residence	Non-Participating	570295.34	4749481.41	30	37	37	27	37	37	31	37	38	52	27	52
152	Year-Round Residence	Participating	569899.10	4749419.76	30	38	39	27	38	38	31	38	39	52	27	52
153	Year-Round Residence	Non-Participating	568569.87	4750842.99	35	32	37	33	32	36	36	32	38	50	27	50
154	Unknown	Non-Participating	569564.70	4748956.73	26	41	41	25	41	41	27	41	41	49	27	49
155	Year-Round Residence	Non-Participating	568847.75	4752692.33	35	20	35	33	20	33	36	20	36	50	27	50
156	Year-Round Residence	Non-Participating	568273.23	4750195.92	35	34	37	33	34	36	36	34	38	50	27	50
157	Year-Round Residence	Non-Participating	567640.59	4749265.62	35	28	36	33	28	34	36	28	37	50	27	50
158	Year-Round Residence	Non-Participating	568312.30	4750143.06	35	34	38	33	34	37	36	34	38	50	27	50
159	Year-Round Residence	Non-Participating	567594.38	4749243.34	35	28	36	33	28	34	36	28	37	50	27	50
160	Year-Round Residence	Non-Participating	569844.91	4752385.69	35	21	35	33	21	33	36	21	36	50	27	50
161	Year-Round Residence	Non-Participating	567558.69	4749219.42	35	28	36	33	28	34	36	28	37	50	27	50
162	Year-Round Residence	Non-Participating	568927.42	4752694.00	35	20	35	33	20	33	36	20	36	50	27	50
163	Year-Round Residence	Non-Participating	567887.61	4748293.78	26	30	31	25	30	31	27	30	31	49	27	49
164	Year-Round Residence	Non-Participating	567829.18	4750072.95	35	29	36	33	29	35	36	29	37	50	27	50
165	Year-Round Residence	Non-Participating	567854.41	4750001.63	35	30	36	33	30	35	36	30	37	50	27	50
166	Year-Round Residence	Non-Participating	568960.82	4752681.25	35	20	35	33	20	33	36	20	36	50	27	50
167	Year-Round Residence	Non-Participating	567793.49	4749961.75	35	29	36	33	29	34	36	29	37	50	27	50
168	Year-Round Residence	Non-Participating	567758.90	4750004.18	35	29	36	33	29	34	36	29	37	50	27	50
169	Year-Round Residence	Non-Participating	567731.07	4750072.42	35	29	36	33	29	34	36	29	37	50	27	50
170	Year-Round Residence	Non-Participating	569255.59	4752648.98	35	19	35	33	19	33	36	19	36	50	27	50
171	Year-Round Residence	Non-Participating	567585.78	4750216.32	35	28	36	33	28	34	36	28	37	50	27	50
172	Year-Round Residence	Non-Participating	569879.13	4752379.87	35	21	35	33	21	33	36	21	36	50	27	50
173	Public	Non-Participating	569542.00	4752016.12	35	20	35	33	20	33	36	20	36	50	27	50
174	Year-Round Residence	Non-Participating	569297.82	4752760.00	35	20	35	33	20	33	36	20	36	50	27	50
175	Public	Non-Participating	570590.39	4752068.13	35	21	35	33	21	33	36	21	36	50	27	50
176	Year-Round Residence	Non-Participating	569810.04	4752510.27	35	21	35	33	21	33	36	21	36	50	27	50
177	Unknown	Non-Participating	569305.03	4752805.00	35	20	35	33	20	33	36	20	36	50	27	50
178	Year-Round Residence	Non-Participating	570469.61	4752147.17	35	21	35	33	21	33	36	21	36	50	27	50
179	Public	Non-Participating	570594.72	4752115.73	35	21	35	33	21	33	36	21	36	50	27	50
180	Year-Round Residence	Non-Participating	570631.53	4752070.08	35	21	35	33	21	33	36	21	36	50	27	50
181	Public	Non-Participating	570640.26	4752158.08	35	21	35	33	21	33	36	21	36	50	27	50
182	Year-Round Residence	Non-Participating	570648.56	4752117.38	35	21	35	33	21	33	36	21	36	50	27	50
183	Year-Round Residence	Non-Participating	570664.18	4752131.94	35	21	35	33	21	33	36	21	36	50	27	50
184	Year-Round Residence	Non-Participating	570672.98	4752148.82	35	21	35	33	21	33	36	21	36	50	27	50
185	Year-Round Residence	Non-Participating	570640.73	4752176.63	35	21	35	33	21	33	36	21	36	50	27	50
186	Year-Round Residence	Non-Participating	570677.42	4752164.58	35	21	35	33	21	33	36	21	36	50	27	50
187	Year-Round Residence	Non-Participating	570712.67	4752229.46	35	20	35	33	20	33	36	20	36	50	27	50
188	Year-Round Residence	Non-Participating	570657.92	4752210.57	35	21	35	33	21	33	36	21	36	50	27	50
189	Year-Round Residence	Non-Participating	570668.98	4752220.50	35	20	35	33	20	33	36	20	36	50	27	50
190	Year-Round Residence	Non-Participating	571232.55	4750542.16	45	38	46	39	38	42	40	38	42	55	27	55
191	Year-Round Residence	Non-Participating	571608.56	4750951.03	45	24	45	39	24	39	40	24	40	55	27	55
192	Public	Non-Participating	568362.74	4751682.34	35	21	35	33	21	33	36	21	36	50	27	50
193	Public	Non-Participating	567744.91	4750167.70	35	28	36	33	28	34	36	28	37	50	27	50
194	Year-Round Residence	Non-Participating	570834.00	4747298.07	26	20	27	25	20	26	27	20	28	49	27	49
195	Year-Round Residence	Non-Participating	571253.37	4750153.80	45	39	46	39	39	42	40	39	43	55	27	55
196	Year-Round Residence	Non-Participating	570720.66	4747177.49	26	20	27	25	20	26	27	20	28	49	27	49
197	Seasonal Residence	Participating	571131.83	4750132.46	45	36	45	39	36	41	40	36	42	55	27	55
198	Year-Round Residence	Non-Participating	570403.64	4746898.30	26	18	27	25	18	26	27	18	27	49	27	49
199	Unknown	Non-Participating	569257.69	4748905.61	26	35	35	25	35	35	27	35	35	49	27	49
200	Year-Round Residence	Non-Participating	570444.44	4746893.04	26	18	27	25	18	26	27	18	27	49	27	49
201	Year-Round Residence	Non-Participating	570673.93	4749725.35	45	35	45	39	35	41	40	35	41	55	27	55
202	Year-Round Residence	Non-Participating	570544.19	4746908.91	26	17	27	25	17	26	27	17	27	49	27	49
203	Year-Round Residence	Non-Participating	570325.87	4749494.82	30	37	37	27	37	37	31	37	38	52	27	52
204	Unknown	Non-Participating	570640.92	4746963.17	26	17	27	25	17	26	27	17	27	49	27	49
205	Year-Round Residence	Non-Participating	570673.58	4746983.15	26	17	27	25	17	26	27	17	27	49	27	49
206	Year-Round Residence	Non-Participating	569803.88	4749130.26	26	40	40	25	40	40	27	40	40	49	27	49
207	Year-Round Residence	Non-Participating	569146.41	4748470.60	26	31	32	25	31	32	27	31	32	49	27	49
208	Year-Round Residence	Non-Participating	570306.53	4746795.57	26	18	27	25	18	26	27	18	27	49	27	49
209	Year-Round Residence	Non-Participating	567872.58	4749460.82	35	30	36	33	30	35	36	30	37	50	27	50
210	Year-Round Residence	Non-Participating	570959.39	4747906.86	26	20	27	25	20	26	27	20	28	49	27	49
211	Year-Round Residence	Non-Participating	569091.23	4748469.17	26	33	34	25	33	33	27	33	34	49	27	49
212	Year-Round Residence	Non-Participating	570983.51	4747947.28	26	20	27	25	20	26	27	20	28	49	27	49
213	Year-Round Residence	Non-Participating	569004.26	4748579.18	26	35	35	25	35	35	27	35	35	49	27	49
214	Year-Round Residence	Non-Participating	570873.11	4748201.08	26	25	29	25	25	28	27	25	29	49	27	49
215	Year-Round Residence	Non-Participating	570837.62	4748244.37	26	27	30	25	27	29	27	27	30	49	27	49
216	Year-Round Residence	Non-Participating	567898.40	4749374.66	35	30	36	33	30	35	36	30	37	50	27	50
217	Public	Participating	570554.00	4750310.61	45	36	45	39	36	41	40	36	41	55	27	55
218	Public	Non-Participating	568075.89	4752556.37	35	18	35	33	18	33	36	18	36	50	27	50
219	Unknown	Non-Participating	570843.09	4750478.54	45	42	47	39	42	44	40	42	44	55	27	55
220	Year-Round Residence	Non-Participating	567915.86	4749336.42	35	30	36	33	30	35	36	30	37	50	27	50
221	Year-Round Residence	Non-Participating	570539.58	4750606.34	45	32	45	39	32	40	40	32	41	55	27	55
222	Year-Round Residence	Non-Participating	570500.38	4750670.52	45	31	45	39	31	40	40	31	41	55	27	55
223	Year-Round Residence	Non-Participating	567944.57	4749268.18	35	30	36	33	30	35	36	30	37	50	27	50
224	Unknown	Non-Participating	568375.18	4750338.33	35	33	37	33	33	36	36	33	38	50	27	50

Table G-2: Long-Term Future Total Sound Levels

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Ambient Daytime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Daytime Noise Level[1,2] (dBA)	Ambient Summer Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Summer Nighttime Noise Level[3,4] (dBA)	Ambient Winter Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Winter Nighttime Noise Level[5,6] (dBA)	Ambient Daytime Average LEQ (dBA, ANS Filtered)	Project Only Annual L50 (dBA)	Typical Project Daytime Noise Level[7,8] (dBA)
			X (m)	Y (m)												
225	Year-Round Residence	Non-Participating	567779.76	4749367.81	35	29	36	33	29	35	36	29	37	50	27	50
226	Year-Round Residence	Non-Participating	567703.11	4749411.58	35	29	36	33	29	34	36	29	37	50	27	50
227	Year-Round Residence	Non-Participating	567437.83	4749126.57	35	27	36	33	27	34	36	27	37	50	27	50
228	Year-Round Residence	Non-Participating	567395.20	4749095.60	35	26	36	33	26	34	36	26	37	50	27	50
229	Unknown	Non-Participating	568222.99	4752734.08	35	17	35	33	17	33	36	17	36	50	27	50
230	Public	Non-Participating	567865.85	4748367.78	26	30	32	25	30	31	27	30	32	49	27	49
231	Year-Round Residence	Non-Participating	567605.57	4750119.19	35	28	36	33	28	34	36	28	37	50	27	50
232	Year-Round Residence	Non-Participating	569229.29	4752739.45	35	20	35	33	20	33	36	20	36	50	27	50
233	Public	Non-Participating	567334.37	4750574.31	35	25	35	33	25	34	36	25	36	50	27	50
234	Year-Round Residence	Non-Participating	567305.82	4750627.27	35	24	35	33	24	34	36	24	36	50	27	50
235	Year-Round Residence	Non-Participating	569763.21	4752389.65	35	20	35	33	20	33	36	20	36	50	27	50
236	Public	Non-Participating	569927.13	4751691.92	35	20	35	33	20	33	36	20	36	50	27	50
237	Public	Non-Participating	570159.50	4751921.17	35	21	35	33	21	33	36	21	36	50	27	50
238	Year-Round Residence	Non-Participating	570649.57	4752189.59	35	21	35	33	21	33	36	21	36	50	27	50
239	Year-Round Residence	Non-Participating	570654.28	4752199.89	35	21	35	33	21	33	36	21	36	50	27	50
240	Year-Round Residence	Non-Participating	570687.51	4752185.79	35	21	35	33	21	33	36	21	36	50	27	50
241	Year-Round Residence	Non-Participating	570698.85	4752211.43	35	20	35	33	20	33	36	20	36	50	27	50
242	Year-Round Residence	Non-Participating	570806.77	4747367.86	26	20	27	25	20	26	27	20	28	49	27	49
243	Year-Round Residence	Non-Participating	570876.81	4750015.49	45	38	46	39	38	42	40	38	42	55	27	55
244	Year-Round Residence	Non-Participating	570753.47	4747395.47	26	19	27	25	19	26	27	19	27	49	27	49
245	Year-Round Residence	Non-Participating	570611.42	4749669.71	30	36	37	27	36	36	31	36	37	52	27	52
246	Year-Round Residence	Non-Participating	570828.31	4747616.50	26	20	27	25	20	26	27	20	28	49	27	49
247	Year-Round Residence	Non-Participating	569293.04	4748701.69	26	36	37	25	36	37	27	36	37	49	27	49
248	Year-Round Residence	Non-Participating	571541.55	4748220.90	34	21	34	31	21	31	34	21	34	53	27	53
249	Year-Round Residence	Non-Participating	570373.87	4749512.77	30	36	37	27	36	37	31	36	37	52	27	52
250	Year-Round Residence	Non-Participating	572152.87	4748582.63	34	20	34	31	20	31	34	20	34	53	27	53
251	Year-Round Residence	Non-Participating	571774.89	4748195.40	34	20	34	31	20	31	34	20	34	53	27	53
252	Year-Round Residence	Non-Participating	572393.50	4748198.39	34	21	34	31	21	31	34	21	34	53	27	53
253	Year-Round Residence	Non-Participating	569728.11	4749085.84	26	41	41	25	41	41	27	41	41	49	27	49
254	Year-Round Residence	Non-Participating	572532.80	4748449.56	34	22	34	31	22	31	34	22	35	53	27	53
255	Year-Round Residence	Non-Participating	570802.37	4752341.85	35	18	35	33	18	33	36	18	36	50	27	50
256	Year-Round Residence	Non-Participating	572322.77	4748674.34	34	20	34	31	20	31	34	20	34	53	27	53
257	Year-Round Residence	Non-Participating	572474.99	4748945.70	34	24	34	31	24	32	34	24	35	53	27	53
258	Public	Participating	568697.55	4748407.61	26	37	37	25	37	37	27	37	37	49	27	49
259	Year-Round Residence	Non-Participating	572457.84	4748744.73	34	21	34	31	21	31	34	21	34	53	27	53
260	Unknown	Non-Participating	572537.36	4749013.58	34	24	34	31	24	32	34	24	35	53	27	53
261	Year-Round Residence	Non-Participating	572277.40	4749489.23	34	33	36	31	33	35	34	33	37	53	27	53
262	Year-Round Residence	Non-Participating	567291.22	4751402.10	35	19	35	33	19	33	36	19	36	50	27	50
263	Unknown	Non-Participating	572359.76	4749488.35	34	29	35	31	29	33	34	29	35	53	27	53
264	Year-Round Residence	Non-Participating	570820.38	4752315.64	35	18	35	33	18	33	36	18	36	50	27	50
265	Year-Round Residence	Non-Participating	572476.37	4749562.90	34	26	34	31	26	32	34	26	35	53	27	53
266	Year-Round Residence	Non-Participating	568986.07	4752652.27	35	20	35	33	20	33	36	20	36	50	27	50
267	Year-Round Residence	Non-Participating	572129.12	4749426.56	34	36	38	31	36	37	34	36	38	53	27	53
268	Year-Round Residence	Non-Participating	569018.22	4752677.46	35	20	35	33	20	33	36	20	36	50	27	50
269	Year-Round Residence	Non-Participating	571413.35	4751717.60	45	23	45	39	23	39	40	23	40	55	27	55
270	Year-Round Residence	Non-Participating	569047.23	4752666.41	35	20	35	33	20	33	36	20	36	50	27	50
271	Year-Round Residence	Non-Participating	570838.81	4752353.57	35	18	35	33	18	33	36	18	36	50	27	50
272	Year-Round Residence	Non-Participating	569066.40	4752719.39	35	20	35	33	20	33	36	20	36	50	27	50
273	Year-Round Residence	Non-Participating	568750.17	4752555.24	35	18	35	33	18	33	36	18	36	50	27	50
274	Year-Round Residence	Non-Participating	568719.06	4752557.98	35	18	35	33	18	33	36	18	36	50	27	50
275	Year-Round Residence	Non-Participating	570837.96	4752436.24	35	18	35	33	18	33	36	18	36	50	27	50
276	Year-Round Residence	Non-Participating	568702.37	4752563.05	35	18	35	33	18	33	36	18	36	50	27	50
277	Year-Round Residence	Non-Participating	568688.78	4752565.10	35	18	35	33	18	33	36	18	36	50	27	50
278	Year-Round Residence	Non-Participating	568673.40	4752570.61	35	18	35	33	18	33	36	18	36	50	27	50
279	Year-Round Residence	Non-Participating	570789.93	4752380.77	35	18	35	33	18	33	36	18	36	50	27	50
280	Year-Round Residence	Non-Participating	568658.45	4752576.57	35	18	35	33	18	33	36	18	36	50	27	50
281	Year-Round Residence	Non-Participating	570677.59	4752235.20	35	20	35	33	20	33	36	20	36	50	27	50
282	Year-Round Residence	Non-Participating	571376.84	4751734.24	45	23	45	39	23	39	40	23	40	55	27	55
283	Year-Round Residence	Non-Participating	570687.96	4752247.74	35	20	35	33	20	33	36	20	36	50	27	50
284	Public	Non-Participating	570704.13	4752040.88	35	22	35	33	22	33	36	22	36	50	27	50
285	Year-Round Residence	Non-Participating	570701.89	4752256.18	35	19	35	33	19	33	36	19	36	50	27	50
286	Unknown	Non-Participating	570714.73	4752263.29	35	19	35	33	19	33	36	19	36	50	27	50
287	Year-Round Residence	Non-Participating	570809.45	4752018.40	35	22	35	33	22	33	36	22	36	50	27	50
288	Year-Round Residence	Non-Participating	571340.99	4751749.35	45	23	45	39	23	39	40	23	40	55	27	55
289	Year-Round Residence	Non-Participating	570850.30	4752006.93	35	22	35	33	22	33	36	22	36	50	27	50
290	Year-Round Residence	Non-Participating	570892.05	4751992.09	35	22	35	33	22	33	36	22	36	50	27	50
291	Year-Round Residence	Non-Participating	571014.88	4751970.46	35	22	35	33	22	33	36	22	36	50	27	50
292	Public	Non-Participating	571111.42	4751908.19	45	22	45	39	22	39	40	22	40	55	27	55
293	Unknown	Non-Participating	571304.34	4751778.21	45	23	45	39	23	39	40	23	40	55	27	55
294	Year-Round Residence	Non-Participating	571678.99	4751671.07	45	23	45	39	23	39	40	23	40	55	27	55
295	Year-Round Residence	Non-Participating	571547.10	4751180.35	45	23	45	39	23	39	40	23	40	55	27	55
296	Year-Round Residence	Non-Participating	572596.07	4750651.28	34	21	34	31	21	31	34	21	34	53	27	53
297	Year-Round Residence	Non-Participating	568443.92	4750372.68	35	33	37	33	33	36	36	33	38	50	27	50
298	Year-Round Residence	Non-Participating	568483.01	4750427.62	35	34	37	33	34	36	36	34	38	50	27	50
299	Year-Round Residence	Non-Participating	566688.38	4749344.81	35	23	35	33	23	33	36	23	36	50	27	50
300	Year-Round Residence	Non-Participating	566763.25	4749325.90	35	23	35	33	23	33	36	23	36	50	27	50
301	Year-Round Residence	Non-Participating	567163.35	4748887.86	26	25	29	25	25	28	27	25	29	49	27	49
302	Year-Round Residence	Non-Participating	567069.27	4748853.77	26	25	29	25	25	28	27	25	29	49	27	49
303	Public	Non-Participating	567059.75	4748700.62	26	25	28	25	25	28	27	25	29	49	27	49
304	Year-Round Residence	Non-Participating	566802.31	4748189.24	26	17	27	25	17	26	27	17	27	49	27	49
305	Year-Round Residence	Non-Participating	566642.20	4748163.67	26	16	27	25	16	26	27	16	27	49	27	49
306	Year-Round Residence	Non-Participating	566979.42	4747637.85	26	19	27	25	19	26	27	19	27	49	27	49
307	Year-Round Residence	Non-Participating	567099.23	4747774.79	26	22	28	25	22	27	27	22	28	49	27	49
308	Year-Round Residence	Non-Participating	567007.48	4747703.39	26	19	27	25	19	26	27	19	27	49	27	49
309	Year-Round Residence	Non-Participating	567351.84	4747727.92	26	22	28	25	22	27	27	22	28	49	27	49
310	Unknown	Non-Participating	567421.37	4747741.92	26	23	28	25	23	27	27	23	28	49	27	49
311	Year-Round Residence	Non-Participating	567709.57	4747729.47	26	24	28	25	24	28	27	24	29	49	27	49
312	Year-Round Residence	Non-Participating	568056.79	4747559.37	26	24	28	25	24	28	27	24	29	49	27	49
313	Year-Round Residence	Non-Participating	568143.55	4747492.78	26	24	28	25	24	28	27	24	29	49	27	49
314	Public	Non-Participating	573576.04	4749828.47	34	18	34	31	18	31	34	18	34	53	27	53
315	Year-Round Residence	Non-Participating	568602.80	4750580.02	35	34	38	33	34	37	36	34	38	50	27	50
316	Year-Round Residence	Non-Participating	566729.96	4749483.57	35	23	35	33	23	33	36	23	36	50	27	50
317	Year-Round Residence	Non-Participating	567279.52	4749013.61	26	26	29	25	26	28	27	26	29	49	27	49
318	Year-Round Residence	Non-Participating	567234.84	4748990.48	26	25	29	25	25	28	27	25	29	49	27	49
319	Year-Round Residence	Non-Participating	566706.31	4748690.52	26	23	28	25	23	27	27	23	28	49	27	49
320	Year-Round Residence	Non-Participating	566847.98	4747795.26	26	18	27	25	18	26	27	18	27	49	27	49
321	Year-Round Residence	Non-Participating	567019.43	4747556.38	26	21	27	25	21	27	27	21	28	49	27	49
322	Year-Round Residence	Non-Participating	567170.06	4747588.19	26	22	27	25	22	27	27	22	28	49	27	49
323	Year-Round Residence	Non-Participating	567591.57	4747854.92	26	24	28	25	24	28	27	24	29	49	27	49
324	Year-Round Residence	Non-Participating	567724.99	4748032.16	26	26	29	25	26	29	27	26	29	49	27	49
325	Public	Non-Participating	567924.69	4748484.41	26	32	33	25	32	32	27	32	33	49	27	49
326	Year-Round Residence	Non-Participating	567832.72	4747643.38	26	22	28	25	22	27	27	22	28	49	27	49
327	Year-Round Residence	Non-Participating	568602.98	4746920.16	26	21	27	25	21	26	27	21	28	49	27	49
328	Year-Round Residence	Non-Participating	568602.80	4746806.20	26	20	27	25	20	26	27	20	28	49	27	49
329	Year-Round Residence	Non-Participating	568733.82	4746784.15	26	20	27	25	20	26	27	20	28	49	27	49
330	Year-Round Residence	Non-Participating	568379.26	4746530.30	26	19	27	25	19	26	27	19	27	49	27	49
331	Year-Round Residence	Non-Participating	568649.05	4746694.51	26	19	27	25	19	26	27	19	27	49	27	49
332	Seasonal Residence	Non-Participating	568665.27	4746559.35	26	19	27	25	19	26	27	19	27	49	27	49
333	Year-Round Residence	Non-Participating	568658.15	4746482.43	26	18	27	25	18	26	27	18	27	49	27	49
334	Year-Round Residence	Non-Participating	569416.12	4746629.33	26	18	27	25	18	26	27	18	27	49	27	49
335	Year-Round Residence	Non-Participating	569383.86	4746504.34	26	17	27	25	17	26	27	17	27	49	27	49
336	Seasonal Residence	Non-Participating	569777.18	4746578.72	26	17	27	25	17	26	27	17	27	49	27	49

Table G-2: Long-Term Future Total Sound Levels

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Ambient Daytime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Daytime Noise Level[1,2] (dBA)	Ambient Summer Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Summer Nighttime Noise Level[3,4] (dBA)	Ambient Winter Nighttime L90 (dBA, ANS Filtered)	Project Only Annual L10 (dBA)	Worst Case Future Winter Nighttime Noise Level[5,6] (dBA)	Ambient Daytime Average LEQ (dBA, ANS Filtered)	Project Only Annual L50 (dBA)	Typical Project Daytime Noise Level[7,8] (dBA)
			X (m)	Y (m)												
337	Year-Round Residence	Non-Participating	570085.96	4746487.53	26	17	27	25	17	26	27	17	27	49	27	49
338	Year-Round Residence	Non-Participating	570214.03	4746605.64	26	17	27	25	17	26	27	17	27	49	27	49
339	Year-Round Residence	Non-Participating	570502.82	4746733.69	26	17	27	25	17	26	27	17	27	49	27	49
340	Public	Non-Participating	569982.69	4747395.09	26	21	27	25	21	27	27	21	28	49	27	49
341	Public	Non-Participating	570636.02	4746880.89	26	17	27	25	17	26	27	17	27	49	27	49
342	Seasonal Residence	Non-Participating	570631.08	4746914.46	26	17	27	25	17	26	27	17	27	49	27	49
343	Year-Round Residence	Non-Participating	570677.55	4746933.28	26	17	27	25	17	26	27	17	27	49	27	49
344	Year-Round Residence	Non-Participating	570748.93	4746980.95	26	17	27	25	17	26	27	17	27	49	27	49
345	Year-Round Residence	Non-Participating	570882.06	4747052.83	26	14	26	25	14	26	27	14	27	49	27	49
346	Public	Participating	570231.70	4748743.29	26	40	40	25	40	40	27	40	40	49	27	49
347	Public	Non-Participating	571142.46	4749860.37	45	38	46	39	38	42	40	38	42	55	27	55
348	Year-Round Residence	Non-Participating	571902.73	4748867.86	34	33	37	31	33	35	34	33	37	53	27	53
349	Seasonal Residence	Participating	570990.46	4750073.71	45	40	46	39	40	43	40	40	43	55	27	55
350	Year-Round Residence	Non-Participating	570483.09	4750708.69	35	31	36	33	31	35	36	31	37	50	27	50
351	Year-Round Residence	Non-Participating	569936.19	4750675.83	35	34	38	33	34	37	36	34	38	50	27	50
352	Public	Non-Participating	569906.93	4751111.13	35	27	36	33	27	34	36	27	37	50	27	50
353	Year-Round Residence	Non-Participating	572130.00	4749927.83	34	28	35	31	28	33	34	28	35	53	27	53
354	Year-Round Residence	Non-Participating	572347.74	4749587.53	34	28	35	31	28	32	34	28	35	53	27	53
355	Year-Round Residence	Non-Participating	572388.99	4749601.27	34	27	34	31	27	32	34	27	35	53	27	53
356	Year-Round Residence	Non-Participating	572377.93	4749674.04	34	28	35	31	28	33	34	28	35	53	27	53
357	Year-Round Residence	Non-Participating	572403.52	4749657.29	34	27	34	31	27	32	34	27	35	53	27	53
358	Year-Round Residence	Non-Participating	572449.88	4749684.62	34	27	34	31	27	32	34	27	35	53	27	53
359	Year-Round Residence	Non-Participating	572422.83	4749715.98	34	28	35	31	28	32	34	28	35	53	27	53
360	Year-Round Residence	Non-Participating	572774.46	4749767.27	34	22	34	31	22	31	34	22	35	53	27	53
361	Year-Round Residence	Non-Participating	572717.98	4749764.92	34	23	34	31	23	31	34	23	35	53	27	53
362	Year-Round Residence	Non-Participating	572682.80	4749798.81	34	23	34	31	23	31	34	23	35	53	27	53
363	Year-Round Residence	Non-Participating	572762.62	4749789.18	34	22	34	31	22	31	34	22	35	53	27	53
364	Year-Round Residence	Non-Participating	572791.18	4749801.92	34	22	34	31	22	31	34	22	35	53	27	53
365	Year-Round Residence	Non-Participating	572751.22	4749831.40	34	23	34	31	23	31	34	23	35	53	27	53
366	Year-Round Residence	Non-Participating	572816.05	4749852.16	34	22	34	31	22	31	34	22	35	53	27	53
367	Year-Round Residence	Non-Participating	572803.74	4749814.71	34	22	34	31	22	31	34	22	35	53	27	53
368	Year-Round Residence	Non-Participating	572719.20	4749814.91	34	23	34	31	23	31	34	23	35	53	27	53
369	Year-Round Residence	Non-Participating	572700.86	4749809.70	34	23	34	31	23	31	34	23	35	53	27	53
370	Year-Round Residence	Non-Participating	572772.84	4749837.95	34	22	34	31	22	31	34	22	35	53	27	53
371	Year-Round Residence	Non-Participating	572843.77	4749757.31	34	22	34	31	22	31	34	22	35	53	27	53
372	Year-Round Residence	Non-Participating	572858.24	4749756.37	34	22	34	31	22	31	34	22	35	53	27	53
373	Year-Round Residence	Non-Participating	572872.27	4749754.77	34	22	34	31	22	31	34	22	35	53	27	53
374	Year-Round Residence	Non-Participating	572886.74	4749753.40	34	21	34	31	21	31	34	21	35	53	27	53
375	Year-Round Residence	Non-Participating	572911.71	4749774.18	34	21	34	31	21	31	34	21	34	53	27	53
376	Year-Round Residence	Non-Participating	572905.99	4749797.03	34	21	34	31	21	31	34	21	34	53	27	53
377	Year-Round Residence	Non-Participating	572906.50	4749811.44	34	22	34	31	22	31	34	22	35	53	27	53
378	Year-Round Residence	Non-Participating	572904.14	4749826.69	34	22	34	31	22	31	34	22	35	53	27	53
379	Year-Round Residence	Non-Participating	572909.71	4749859.26	34	21	34	31	21	31	34	21	35	53	27	53
380	Year-Round Residence	Non-Participating	572900.61	4749664.73	34	21	34	31	21	31	34	21	35	53	27	53
381	Year-Round Residence	Non-Participating	572878.71	4749643.76	34	22	34	31	22	31	34	22	35	53	27	53
382	Year-Round Residence	Non-Participating	572834.22	4749666.64	34	22	34	31	22	31	34	22	35	53	27	53
383	Public	Non-Participating	572739.37	4749725.08	34	23	34	31	23	31	34	23	35	53	27	53
384	Year-Round Residence	Non-Participating	572913.11	4749843.02	34	21	34	31	21	31	34	21	35	53	27	53
385	Public	Non-Participating	567635.09	4747727.54	26	24	28	25	24	27	27	24	28	49	27	49
386	Seasonal Residence	Non-Participating	566901.78	4748735.92	26	24	28	25	24	27	27	24	28	49	27	49
387	Year-Round Residence	Non-Participating	567027.75	4749137.63	35	25	35	33	25	34	36	25	36	50	27	50
388	Year-Round Residence	Non-Participating	566845.68	4749079.73	35	24	35	33	24	33	36	24	36	50	27	50
389	Public	Non-Participating	566757.05	4749026.28	35	23	35	33	23	33	36	23	36	50	27	50

Notes:

1. ANS-weighted annual daytime ambient L90 sound level logarithmically added to the modeled annual L10 sound level.
2. Addresses stipulation (f) (4).
3. ANS-weighted summer nighttime ambient L90 sound level logarithmically added to the modeled annual L10 sound level.
4. Addresses stipulation (f) (5).
5. ANS-weighted winter nighttime ambient L90 sound level logarithmically added to the modeled annual L10 sound level.
6. Addresses stipulation (f) (6).
7. ANS-weighted annual daytime ambient Leq sound level logarithmically added to the modeled annual L50 sound level.
8. Addresses stipulation (f) (9).

Appendix H
Glossary of Terms

This section includes some of the terms used throughout the report which may require a more detailed explanation.

Amplitude modulation	Amplitude modulation is a recurring variation in the overall level of sound over time. The modulation sound is typically broadband, and it comes from interactions of the blade with the atmosphere, wind turbulence, directionality of the broadband sound of the blades, or tower interaction with the wake of the blade. This modulation is not infrasound; rather, it is variation in audible sound that is synchronized to the passage of the turbine blades.
ANS-weighted	A high-frequency natural sound (HFNS) filter applied to the measured one-third octave-band data to remove seasonal noise like insects. This technique removes all sound energy above the 1,250 Hertz frequency band. The methodology for the filtration process is specified in ANSI/ASA S12.100-2014 and the sound pressure levels presented using this methodology are indicated as ANS-weighted levels (presented in dBA).
G	The portion of ground that is considered porous as defined under ISO 9613-2. This is used as part of the ground attenuation calculation between the source and receiver. For example, a G-factor of 0.5 corresponds to "mixed ground" consisting of half hard and half porous ground cover. A G-factor of zero (0) corresponds to "hard ground" consisting of surfaces with low porosity including water, and a G of 1 represents all porous ground.
Intensity (Loudness)	Sound intensity is a measure of how much energy or power is transmitted. Humans do not perceive increases in sound level (loudness) in a linear manner. For this reason, sound levels are quantified in terms of a logarithmic ratio between the sound pressure of a given noise and the minimum sound pressure discernable by the human ear. This ratio is called the sound pressure level (L_p) and is always reported on a decibel (dB) scale. The logarithmic dB scale accommodates the wide range of sound intensities found in the environment. For example, 0 dB is the minimum discernable sound pressure at 2.9×10^{-9} lbs/in^2, while 140 dB is the threshold of pain at 0.029 psi. The ratio of the two sound pressures is 10,000,000, but there is only a 140-dB difference when using the logarithmic scale.
Infrasound	Sound in the frequencies below 20 Hz.

ISO 9613-2	An international standard which specifies an engineering method for calculating the attenuation of sound during outdoor propagation in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound level under meteorological conditions favorable to propagation from sources of known sound emission, and is used throughout the United States and the world.
L_{eq}	The equivalent sound level, is the level of a hypothetical steady sound that would have the same energy (*i.e.,* the same time-averaged mean square sound pressure) as the actual fluctuating sound observed. The equivalent level is designated L_{eq} and is also A-weighted. The equivalent level represents the time average of the fluctuating sound pressure, but because sound is represented on a logarithmic scale and the averaging is done with linear mean square sound pressure values, the L_{eq} is mostly determined by occasional loud noises.
L_n	Or nth percentile, is the sound level exceeded "n" percent of the time during a measurement period. For example, if 100 sound levels were measured over a 10-minute period, and were sorted from highest to lowest, the L_{90} would be the 90^{th} lowest of the 100 values. The L_{90} is close to the lowest sound level observed. It is essentially the same as the residual sound level, which is the sound level observed when there are no obvious nearby intermittent noise sources. The L_{10} is the sound level exceeded only 10 percent of the time. It is the 10^{th} lowest of the 100 samples described above. It is close to the maximum level observed during the measurement period.
LEQ-night-year	The A-weighted long-term average sound level determined over all the night periods of a year; in which the night is eight hours (23:00 to 07:00 local time). Thus, the LEQ-night-year is an annual average (365 nights).
L_{max}	The maximum sound level over a given time period. The L_{max} is typically due to discrete, identifiable events such as an airplane overflight, car or truck pass by, or a dog bark for example.
L_{DN}	the day-night average sound level, sometimes abbreviated as DNL, presented in dBA. The DNL is the 24-hour average sound level obtained by the logarithmic average of the average daytime sound level (L_D) and the average nighttime sound level (L_N) that incorporates a 10-decibel "penalty" to each nighttime-hour sound level. This penalty accounts for the greater sensitivity to sound events during nighttime hours. The L_D and L_N are both calculated using hourly

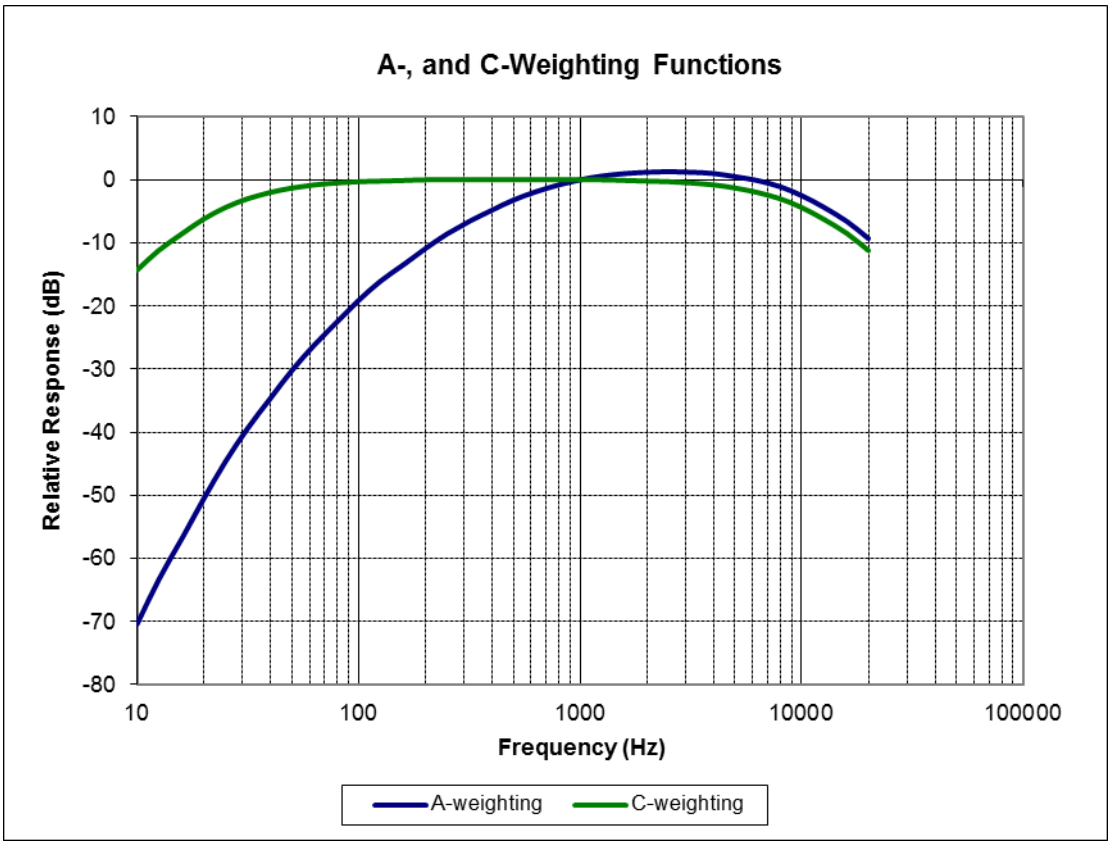
equivalent sound levels ($L_{eq(h)}$). The Environmental Protection Agency defines daytime as the 15 hours from 7:00 AM-10:00 PM and nighttime as the 9 hours from 10:00 PM-7:00 AM.

Low frequency — Sound contained in the frequencies from 20 Hz to 200 Hz.

Octave bands — The International Standards Organization (ISO) has agreed upon "preferred" frequency bands for sound measurement and by agreement the octave band is the widest band for frequency analysis. The upper frequency limit of the octave band is approximately twice the lower frequency limit and each band is identified by its geometric mean called the band centre frequency. The octave band centre frequencies typically used for sound level analyses are 31.5, 63, 125, 250, 500, 1000, 2000, 4000, and 8000 Hz. When more detailed information about a noise is required, standardized one-third octave band analysis may be used.

Weighting — The sound level meter used to measure noise is a standardized instrument.[24] It contains "weighting networks" to adjust the frequency response of the instrument to approximate that of the human ear under various conditions. One network is the A-weighting network, which most closely approximates how the human ear responds to sound as a function of frequency, and is the accepted scale used for community sound level measurements. Sounds are frequently reported as detected with the A-weighting network of the sound level meter in dBA. A-weighted sound levels emphasize middle frequencies (i.e., middle pitched—around 1,000 Hertz sounds), and de-emphasize lower and higher frequencies. The C-weighting network has a nearly flat response for frequencies between 63 Hz and 4000 Hz and is noted as dBC. These are shown graphically below.

[24] *American National Standard Specification for Sound Level Meters*, ANSI S1.4-1983, published by the Standards Secretariat of the Acoustical Society of America, Melville, NY.


A-, and C-Weighting Functions
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Relative Response (dB)
10
100
1000
10000
100000
Frequency (Hz)
A-weighting
C-weighting