APPENDIX F

Table of Roadway Field Evaluation (Condensed)

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APPENDIX F

CASSADAGA WIND PROJECT

ROADWAY FIELD EVALUATION TABLE (CONDENSED)

ABBREVIATION INDEX

PAVEMENT DEPTH: VAR - VARIES UP TO 3" FOR OIL & STONE, 3"-5" FOR ASPHALT PAVEMENT
PAVEMENT DEPTH: UNK - UNKNOWN **ROAD TYPES:** A- ASPHALT GR- GRAVEL
PAVEMENT CONDITIONS: P- POOR F- FAIR G- GOOD VG- VERY GOOD (NEW)
ALIGNMENT: T- TANGENT C- CURVED W- WINDING
TERRAIN: F- FLAT R- ROLLING M- MOUNTAINOUS
POSTED BRIDGE/CULV. TYPE: R POSTED LOAD - PL
POSTED ROAD WGT.: LD - LOCAL DELIVERY TRUCKS ONLY

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	PAVEMENT DEPTH (IN)	NO. OF LANES	LANE WIDTH (FT)	SHOULDER WIDTH (FT)	PAVEMENT MARKINGS	ROAD TYPE	PAVEMENT CONDITION	ALIGNMENT	TERRAIN	POSTED BRIDGE	POSTED BRIDGE TYPE	POSTED ROAD	POSTED ROAD WGT. (T)	HAZARDOUS CURVES	CURVE WARNING SPEED (MPH)
NY 60	I-90 RAMP	US 20	0.6	POMFRET	UNK	4	13	0	YES	A	VG	T	F	NO		NO	-	NO	-
NY 60	US 20	NY 83 LAONA	2.6	POMFRET	UNK	2	12	8	YES	A	G	C	F	NO		NO	-	NO	-
NY 60	NY 83 LAONA	CR 58/MAPLE AVE	4.9	POMFRET/STOCKTON	UNK	2	12	10	YES	A	G	C	R	NO		NO	-	NO	-
NY 60	CR 58/MAPLE AVE	SYLVESTER RD	6.9	STOCKTON/CHARLOTTE/ GERRY	UNK	2	12	6	YES	A	G	C	F	NO		NO	-		-
NY 60	SYLVESTER RD	CR 50 & 65	4.8	GERRY	UNK	2	12	7	YES	A	F	C	R	NO		NO	-	NO	-
NY 60	CR 50 & 65	CR 380	1.6	GERRY	UNK	2	12	10	YES	A	F			NO		NO	-	NO	-
NY 60	CR 380	GIRTS RD	1.6	ELLICOTT	UNK	3	12	8	YES	A	G	C	R	NO		NO	-	NO	-
NY 60	GIRTS RD	I-86 RAMP	2	ELLICOTT	UNK	2	12	10	YES	A	G	C	R	NO		NO	-	NO	-
CR 72 BARD RD	NY 60	SHUMLA RD	1	POMFRET/ARKWRIGHT	7.5"	2	11	5	YES	A	G	C	F	NO		NO	-	NO	-
CR 72 BARD RD	SHUMLA RD	HALL RD	2.1	ARKWRIGHT	7"-7.5"	2	11	8	YES	A	G	C	R	NO		YES	6	YES	-
CR 72 BARD RD	HALL RD	CR 79 CENTER RD	1.7	ARKWRIGHT	5"-7"	2	11	5	YES	A	G	C	R	NO		YES	6	YES	40/45
CR 72 BARD RD	CR 79 CENTER RD	CR 85 FARNGTN. RD	2.3	ARKWRIGHT	7"	2	11	8	YES	A	G	W	R	NO		YES	6	YES	40
TARBOX RD	CR 72 BARD RD	GRISWOLD RD	3.2	ARKWRIGHT	UNK	2	10	5	NO	G	F	W	R	NO		YES	6	YES	35
BARNUM RD	CR 72 BARD RD	HIGH ST	0.7	POMFRET/STOCKTON	VAR	2	9	5	NO	A	P	C	R	NO		NO	LD	YES	-
HIGH ST	NY 60	BARNUM RD	0.7	STOCKTON	VAR	2	9	4	NO	A	G	T	R	NO		NO	LD	NO	-
MOON RD	CR 71	NY 60	1	STOCKTON	VAR	2	9	5	NO	A	G			NO		NO	-	NO	-
CR 75 NELSON RD	NY 60	BARNUM RD	1	STOCKTON/CHARLOTTE	10"-17"	2	9	5	YES	A	G	T	R	NO		NO	-	NO	-
CR 75 NELSON RD	BARNUM RD	CR 66/77 PARK ST	4.5	CHARLOTTE	12"-17.5"	2	9	5	YES	A	F	C	R	NO		YES	6	YES	45
SMITH RD	BERNARD RD	HALL RD	1.4	CHARLOTTE	VAR	2	10	5	NO	A	F		R	NO		NO	-	NO	-
BARNUM RD	HIGH ST	NELSON RD	1.5	CHARLOTTE	VAR	2	9	5	NO	A	P	T	R	NO			LD	NO	-
CASSADAGA RD	BARNUM RD	HALL RD	1.8	CHARLOTTE	VAR	2	9	5	NO	A	P	C	M	NO			-	YES	35
CASSADAGA RD	HALL RD	CR 77 ROOD RD	2.5	CHARLOTTE	VAR	2	9	5	NO	A	VG	C	R	NO		NO	-	NO	-
HALL RD	CR72 BARD ROAD	CR 77 CHARLOTTE CTR. RD	5.1	CHARLOTTE	VAR/UNK	2	9	5	NO	A/G	F	C	R	NO		NO	-	YES	-
BERNARD RD	SMITH RD	HALL RD	1.3	CHARLOTTE	VAR	2	10	5	NO	A	G	C	R	NO		NO	-	YES	-
AMES RD	NELSON RD	HALL RD	1.2	CHARLOTTE	VAR	2	10	5	NO	A	F	C	R	NO		NO	-	NO	-
HOOKER RD	NELSON RD	CR 77 CHARLOTTE CTR. RD	1.1	CHARLOTTE	VAR	2	9	6	NO	A	G	T	R	YES	R	NO	-	NO	-
PROSPECT ST/ CHARLOTTE HILL RD	NY 60	CR 75 WATER ST	1.9	CHARLOTTE	VAR	2	10	4	NO	A	G	C	M	NO			-	NO	-
ANDREWS RD	NELSON RD	WATER ST	1.3	CHARLOTTE	VAR/UNK	2	9	5	NO	A/G		C	R	NO		NO	-	NO	-
GRISWOLD RD	CR 72 BARD RD	NORTH HILL RD	1.4	ARKWRIGHT	10"-13.5"	2	9	5	NO	A/G	F	W	R	NO		NO	-	YES	25
NORTH HILL RD	GRISWOLD RD	CR 77 ROOD RD	2.9	CHARLOTTE	O A	2	9	5	NO	A	P	C	R	NO		NO	-	NO	-
CR 66 SINCLAIR DR	MILL ST/MAIN ST	SYLVESTER RD	0.4	GERRY/CHARLOTTE	16"-19.5"	2	10	5	YES	A	F	T	F	NO		NO	-	YES	10
CR 66 SINCLAIR DR	SYLVESTER RD	NY 60 AT ACCESS ROAD	0.2	GERRY	16"	2	10	5	YES	A	F	T	F	NO		NO	-	NO	-
SYLVESTER RD	NY 60	CR 66 SINCLAIR DR	0.3	GERRY	YSR	2	10	3	YES	A	G	C	R	NO		NO	-	NO	-
CR 77 ROOD RD	CR 72 BARD RD	RUTTENBUR RD	1	ARKWRIGHT	12"	2	11	6	YES	A	F	T	R	NO		YES	6	NO	-
CR 77 ROOD RD	RUTTENBUR RD	MILL CR RD	2.3	CHARLOTTE	10"-13.5"	2	11	6	YES	A	G	C	R	NO		NO	-	YES	40/45
CR 77 ROOD RD	MILL CR RD	HOOKER RD	1.3	CHARLOTTE	10"	2	11	6	YES	A	G	C	F	NO		YES	6	YES	20/40
CR 66/67 MAIN ST	SINCLAIR DR	CR 64 EAST AVE	0.2	CHARLOTTE	17.5"	2	10	5	YES	A	F	T	F	NO		NO	-	YES	10
CR 77 JAMESTOWN	MAIN ST	NY 60	0.8	GERRY/CHARLOTTE	10.5"-16"	2	11	3	YES	A	G	C	F	NO		NO	-	NO	-
CR 77 PARK	HOOKER RD	MAIN ST	3.3	CHARLOTTE	17.5"	2	10	5	YES	A	G	C	F	NO		YES	6	YES	25/35
CR 66 KENT ST	CR 77 PARK ST	BATES RD	6.7	CHARLOTTE	6"	2	10	4	YES	A	F	C	R	NO		NO	-	YES	30/40/ 45
BATES RD CR 64	CR 66/77 PARK ST	CR 66 THORNTON RD	5.9	CHARLOTTE	8"-10"	2	10	4	YES	A	G	C	R	NO		YES	6	YES	40/45
COOK RD	CR 77 ROOD RD	LEWIS RD	0.7	CHARLOTTE	VAR	2	9	5	NO	A	P	T	R	NO		NO	-	NO	-
RUTTENBUR RD	CR 77 ROOD RD	CR 85 FARNGTN. RD	1.6	ARKWRIGHT	UNK	1	12	5	NO	G	P	W	R	NO		NO	-	YES	15/25
LEWIS RD	RUTTENBUR RD	MILL CR RD	2.1	CHARLOTTE	UNK	1	12	3	YES	G	P	C	R	NO		NO	-	NO	-
MILL CR RD	CR 77 ROOD RD	EAST RD	2.8	CHARLOTTE	VAR/UNK	2	9	4	YES	A/G	P	W	F	NO		NO	-	YES	35
EAST RD	CR 77 CHARLOTTE CTR. RD	BOUTWELL HILL RD	3.2	CHARLOTTE	UNK	2	10	6	NO	G	F	C		NO		NO	-	YES	40/45
SWANSON RD	BOUTWELL HILL RD	CR 66 THORNTON RD	1.1	CHARLOTTE	VAR/UNK	2	9	5	NO	A/G	F	C	R	NO		NO	-	NO	-
CLELAND RD	EAST RD	CR 66 THORNTON RD	2	CHARLOTTE	VAR/UNK	2	9	5	NO	A/G	F	T	R	NO		YES	5	NO	-
C JOHNSON RD	BOUTWELL HILL RD	EAST RD	2.1	CHARLOTTE	VAR/UNK	2	9	5	NO	A/G	F	C	R	NO		NO	-	YES	20
HARPER RD	CR 77 CHARLOTTE CTR. RD	BOUTWELL HILL RD	1.1	CHARLOTTE	VAR	2	10	4	NO	A	F	T	R	NO		YES	6	NO	-
GILBERT RD	CR 66 THORNTON RD	JOHNSON RD	0.7	CHARLOTTE	UNK	2	8	5	NO	G	F	T	R	NO		NO	-	NO	-
BOUTWELL HILL RD	CR 66 THORNTON RD	CR 85 ERWIN RD	5.8	CHARLOTTE/CHERRY CR.	VAR/UNK	2	10	4	NO	A/G	F		R	NO		YES	6		-

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APPENDIX F

CASSADAGA WIND PROJECT

ROADWAY FIELD EVALUATION TABLE (CONDENSED, CONTINUED)

ABBREVIATION INDEX

PAVEMENT DEPTH: VAR - VARIES UP TO 3" FOR OIL & STONE, 3"-5" FOR ASPHALT PAVEMENT
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PAVEMENT CONDITIONS: P- POOR F- FAIR G- GOOD VG- VERY GOOD (NEW)
ALIGNMENT: T- TANGENT C- CURVED W- WINDING
TERRAIN: F- FLAT R- ROLLING M- MOUNTAINOUS
POSTED BRIDGE/CULV. TYPE: R POSTED LOAD - PL
POSTED ROAD WGT.: LD - LOCAL DELIVERY TRUCKS ONLY

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	PAVEMENT DEPTH (IN)	NO. OF LANES	LANE WIDTH (FT)	SHOULDER WIDTH (FT)	PAVEMENT MARKINGS	ROAD TYPE	PAVEMENT CONDITION	ALIGNMENT	TERRAIN	POSTED BRIDGE	POSTED BRIDGE TYPE	POSTED ROAD	POSTED ROAD WGT. (T)	HAZARDOUS CURVES	CURVE WARNING SPEED (MPH)
HOISINGTON RD	LEWIS RD	EAST RD	2.2	CHARLOTTE/CHERRY CR.	VAR	2	9	5	NO	A	P	T	R	NO		NO	-	NO	-
SANFORD RD	BOUTWELL HILL RD	CR 85 ERWIN RD	2.5	CHERRY CREEK	VAR	2	9	4	NO	A	G	W	R	NO		YES	6	NO	-
CR 85 FARNGTN. HOLLOW RD	THORNTON RD	PLANK RD	4.5	CHERRY CREEK	7"	2	10	4	YES	A	G	W	R	NO		NO	-	YES	35/40/45
CR 85 FARNGTN. HOLLOW RD	PLANK RD	CR72	4.4	CHERRY CREEK	3.5"-7"	2	10	5	NO	A	F	W	F	NO		NO	-	YES	45
PLANK RD	DYBKAS RD/TOWN LINE	CR 85 FARNGTN. H. RD	2.9	CHERRY CREEK	VAR	2	9	3	NO	A	G	W	R	NO		YES	6	NO	-
WEAVER HILL RD	PLANK RD	NY 83	2.2	CHERRY CREEK	VAR	2	10	3	NO	A	F	T	R	NO		YES	6	NO	-
ROBERTS RD	NY 60	CR 75 NELSON RD	0.5	CHARLOTTE	UNK	2	8	5	NO	G	F	T	R	NO		YES	6		-
SOUTH HILL RD	CR 72 CASSADAGA RD	PLANK RD	1.5	VILLENOVA	VAR	2	9	3	NO	A	P	T	R	NO		YES	6	NO	-
CR 72 CASSADAGA RD	CR 85 FARNGTN. HOLLOW RD	SOUTH HILL RD	2.7	VILLENOVA	5"-9"	2	11	6	YES	A	F	C		NO		YES	6	YES	40

APPENDIX G

Table of Roadway Restrictions

Table of Intersection Restrictions

APPENDIX G

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CASSADAGA WIND PROJECT

ROADWAY RESTRICTION TABLE

ROUTE/ROAD NAME	FROM	TO	TOWN(S)	RESTRICTION LOCATION	RESTRICTION	HEIGHT/WGT. LIMIT
NY 60	I-90	US 20	POMFRET	NY 60 BRIDGE OVER I-90	UNDER BRIDGE CLEARANCE	13' - 11"
				NY 60/I-90 RAMP INTERSECTION	SIGNAL HEAD CLEARANCE	15.5' TO 17'
				NY 60/WALMART DWY INTERSECTION	SIGNAL HEAD CLEARANCE	15.5' TO 17'
				NY 60/US 20 INTERSECTION	SIGNAL HEAD CLEARANCE	15.5' TO 17'
NY 60	US 20	CR 75 NELSON RD	POMFRET/STOCKTON	NY 60/MAPLE AVE & HIGH ST INTERSECTION	SIGNAL HEAD CLEARANCE	15.5' TO 17'
NY 60	CR 75 NELSON RD	CR 77 JAMESTOWN ST	CHARLOTTE/GERRY	NY 60 BRIDGE OVER CR 66 SINCLAIR DR	UNDER BRIDGE CLEARANCE	16' - 1"
NY 60	CR 77 JAMESTOWN ST	CR 380	GERRY	NY 60/CR 50 & CR 65 INTERSECTION	FLASHING SIGNAL HEAD CLEARANCE	15.5' TO 17'
				NY 60/KIMBALL DR & SALISBURY RD INTERSECTION	FLASHING SIGNAL HEAD CLEARANCE	15.5' TO 17'
				NY 60 BRIDGE OVER CR 380	UNDER BRIDGE CLEARANCE	14' - 3"
NY 60	CR 380	I-86 RAMP	ELLICOTT	NY 60/I-86 WB RAMP INTERSECTION	FLASHING SIGNAL HEAD CLEARANCE	15.5' TO 17'
				I-86 WB BRIDGE OVER NY 60	UNDER BRIDGE CLEARANCE	14' - 3"
				I-86 EB BRIDGE OVER NY 60	UNDER BRIDGE CLEARANCE	15' - 3"
CR 64 EAST AVE/EDSON RD/BATES RD	CR 77/66 MAIN ST	CR 66 THORNTON RD	CHARLOTTE/GERRY/ ELLINGTON	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS
CR 72 BARD RD	NY 60	CR 85 FARRINGTON HOLLOW RD	ARKWRIGHT	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (MAR. 1 TO MAY 31)
CR 72 CASSADAGA RD	CR 85 FARRINGTON HOLLOW RD	SOUTH HILL RD	ARKWRIGHT	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS
CR 75 NELSON RD	BARNUM RD	CR 77 PARK ST	CHARLOTTE	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS
CR 77 ROOD RD	CR 72 BARD RD	CHARLOTTE TOWN LINE	ARKWRIGHT	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (MAR. 1 TO MAY 31)
CR 77 CHARLOTTE CTR/ROOD RD	CR 77/66 MAIN ST	MILL CREEK RD	CHARLOTTE	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (MAR. 1 TO MAY 31)
BOUTWELL HILL RD	CHARLOTTE TOWN LINE	CR 85 ERWIN RD	CHERRY CREEK	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (NOV. 1 TO APR. 30)
CLELAND RD	BOUTWELL HILL RD	CR 66 THORNTON RD	CHARLOTTE	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	5 TONS
PLANK RD	CR 85 FARRINGTON HOLLOW RD	DYBKAS RD	CHERRY CREEK	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (NOV. 1 TO APR. 30)
SANFORD RD	BOUTWELL HILL RD	CR 85 ERWIN RD	CHERRY CREEK	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (NOV. 1 TO APR. 30)
SOUTH HILL RD	DYBKAS RD	CR 72 CASSADAGA RD	VILLENOVA	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS (MAR. 1 TO JUNE 1)
WEAVER RD	PLANK RD	NY 83	CHERRY CREEK	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS
TARBOX RD	CR 72 BARD RD	HALL RD	ARKWRIGHT	LENGTH OF SEGMENT	POSTED LOAD ON ROADWAY	6 TONS
HOOKER RD	HALL RD	CR 77 ROOD RD	CHARLOTTE	HOOKER ROAD BRIDGE OVER TRIB. MILL CREEK	POSTED LOAD	R POSTED

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APPENDIX G

CASSADAGA WIND PROJECT

INTERSECTION RESTRICTION TABLE (POTENTIAL ACCESS ROUTE LOCATIONS ONLY)

POTENTIAL ACCESS ROUTE ROADS WITH INTERSECTION RESTRICTIONS	FROM	TO	TOWN(S)	LENGTH (MI)	ACCESS ROUTE	TYPE	INTERSECTION RESTRICTION LOCATION	RELOCATE SIGNS	RELOCATE UTILITIES AND/OR UTIL. POLES	REMOVE TREES	DITCH WORK	DRAINAGE PIPE WORK
ROBERTS RD	NY 60	CR 75 NELSON RD	CHARLOTTE	0.5	1	G	ROBERTS RD/NY 60	YES	NO	YES	YES	YES
							ROBERTS RD/CR 75	YES	NO	NO	YES	YES?
ANDREWS RD	CR 75 NELSON RD	TURBINE LOC. T39	CHARLOTTE	0.6	1	G	ANDREWS RD/CR 75	YES	NO	YES	YES	YES
CR 72 BARD RD/CASSADAGA RD	NY 60	SOUTH HILL RD	POMFRET/ARKWRIGHT/ VILLENNOVA	9.7	2 THRU 8	A	CR 72/NY 60	YES	YES	YES	YES	YES
HALL RD	CR 72 BARD RD	TURBINE LOC. T38/T43/T33	ARKWRIGHT/CHARLOTTE	4.6	2, 3	A, G	HALL RD/CR 72	NO	YES	NO	YES	NO
CASSADAGA RD	HALL RD	NORTH HILL RD	CHARLOTTE	1.1	3	A	CASSADAGA/HALL	YES	NO	NO	YES	YES
							CASSADAGA /NORTH HILL	YES	YES	YES	NO	NO
CR 77 ROOD RD	CR 72 BARD RD	RUTTENBUR RD	ARKWRIGHT	1	4	A	CR 77 ROOD RD/CR 72	YES	NO	YES	YES	NO
COOK RD	CR 77 ROOD RD	LEWIS RD	CHARLOTTE	0.7	4	G	COOK RD/CR 77	YES	YES	NO	YES	YES
							COOK RD/LEWIS RD	YES	YES	NO	YES	NO?
LEWIS RD	COOK RD	MILL CR RD	CHARLOTTE	1.5	4	G	LEWIS RD/MILL CREEK RD	YES	YES	YES	YES	NO?
PLANK RD	DYBKAS RD	CR 85 FARNGTN. HOLLOW RD	CHERRY CREEK	2.2	6 THRU 8	A	PLANK RD/CR 85	YES	NO	YES	YES	YES
SOUTH HILL RD	CR 72 BARD RD	DYBKAS RD	VILLENOVA	1.5	5 THRU 8	A	SOUTH HILL/CR 72	YES	YES	YES	YES	YES
WEAVER RD	PLANK RD	TURBINE LOC. T23/T17/T14/T5	CHERRY CREEK	0.6	5	A	WEAVER RD/PLANK RD	YES	NO	YES	YES	NO?
BOUTWELL HILL RD	CR 85 THORNTON RD	CLELAND RD	CHARLOTTE/CHERRY CREEK	5.8	6 THRU 8	A, G	BOUTWELL HILL/CR 85	YES	YES	YES	YES	NO
CLELAND RD	SUB STATION/STAGING AREA	CR 66 THORNTON ROAD	CHARLOTTE/CHERRY CREEK	1.3	7, 8	A, G	CLELAND/BOUTWELL HILL	YES	NO	YES	YES	NO?
					8		CLELAND/THORNTON	YES	YES	YES	YES	YES
ALTERNATE ACCESS ROUTE ROADS WITH INTERSECTION RESTRICTIONS												
HOOKER RD	*CR 75 NELSON RD*	*HALL RD*	*CHARLOTTE*	*1.1*	*2*	*A*	*HOOKER RD/CR 75*	*YES*	*YES*	*NO*	*YES*	*YES*
							HOOKER RD/HALL RD	*NO*	*YES*	*NO*	*YES*	*YES*
CASSADAGA RD	*NORTH HILL ROAD*	*CR 77 ROOD RD*	*CHARLOTTE*	*1.4*	*4*	*A*	*CASSADAGA RD/CR 77*	*YES*	*YES*	*NO*	*YES*	*NO*

ABBREVIATIONS: A - ASPHALT G - GRAVEL LOC. - LOCATION T&L - ASPHALT TRUING & LEVELING COURSE UTIL. - UTILITY

APPENDIX H

Table of Potential Roadway Improvements

Table of Intersection Improvements

Map of Potential Roadway Improvement and Intersection Improvement Locations

Maps of Intersection Turning Movements

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APPENDIX H

CASSADAGA WIND PROJECT

POTENTIAL ROADWAY IMPROVEMENT TABLE

POTENTIAL ACCESS ROUTE ROADS NEEDING IMPROVEMEMT	FROM	TO	TOWN(S)	LENGTH (MI)	ACCESS ROUTE	TYPE	TEMPORARY ROADWAY IMPROVEMENT **SEE NOTE 1 BELOW**	PERMANENT ROADWAY IMPROVEMENT **SEE NOTE 1 BELOW**	COMMENTS **(SEE NOTE 2 BELOW)**
ROBERTS RD	NY 60	CR 75 NELSON RD	CHARLOTTE	0.5	1	G	8" GRAVEL	GRADE & ADD 3" GRAVEL	CONDITION RATING FAIR
CR 75 NELSON RD	ROBERTS RD	ANDREWS RD	CHARLOTTE	1.9	1	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	ROAD POSTED FOR 6 TON LIMIT, CONDITION RATING FAIR
ANDREWS RD	CR 75 NELSON RD	TURBINE LOC. T39	CHARLOTTE	0.6	1	G	12" GRAVEL	GRADE & ADD 3" GRAVEL	CONDITION RATING POOR
CR 72 BARD RD/CASSADAGA RD	NY 60	SOUTH HILL RD	POMFRET/ARKWRIGHT/ VILLENNOVA	9.7	2 THRU 8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	ROAD POSTED FOR 6 TON LIMIT (SEASONAL FROM NY 60 TO CR 85), CONDITION RATING FAIR, 4 BRIDGES (BIN'S 3323440, 3325950, 3325860, 3325930)
HALL RD	CR 72 BARD RD	TURBINE LOC. T38/T43/T33	ARKWRIGHT/CHARLOTTE	3.8	2,3	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING FAIR
				0.8		G	8" GRAVEL	GRADE & ADD 3" GRAVEL	
CASSADAGA RD	HALL RD	NORTH HILL RD	CHARLOTTE	1.1	3	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND OIL & STONE OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING VERY GOOD, OIL & STONE
NORTH HILL RD	TURBINE LOC. T7/T11/T3	TURBINE LOC. T20/T19/T21/T36	CHARLOTTE	0.5	3	A	SINGLE COURSE ASPHALT OVERLAY	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR DAMAGED AREAS	CONDITION RATING POOR
CR 77 ROOD RD	CR 72 BARD RD	RUTTENBUR RD	ARKWRIGHT	1	4	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING FAIR, 1 BRIDGE (BIN 3323450)
	RUTTENBUR RD	TURBINE LOC. T57/T56/T35	CHARLOTTE	1.5	4	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING GOOD
COOK RD	CR 77 ROOD RD	LEWIS RD	CHARLOTTE	0.7	4	G	12" GRAVEL	GRADE & ADD 3" GRAVEL	CONDITION RATING POOR
LEWIS RD	COOK RD	MILL CR RD	CHARLOTTE	1.5	4	G	WIDEN W/12" GRAVEL, OR PROVIDE TRAFFIC CONTROL, ADD 12" GRAVEL	GRADE & ADD 3" GRAVEL	CONDITION RATING POOR, WIDEN ROAD FROM 12' TO 20' WIDTH IF POSSIBLE
MILL CR RD	LEWIS RD	TURBINE LOC. T58/T54	CHARLOTTE	0.1	4	G	12" GRAVEL	GRADE & ADD 3" GRAVEL	CONDITION RATING POOR

ABBREVIATIONS: A - ASPHALT G - GRAVEL LOC. - LOCATION T&L - ASPHALT TRUING & LEVELING COURSE UTIL. - UTILITY

NOTE 1: THE POTENTIAL ROADWAY IMPROVEMENTS IN THE TABLE ARE ONLY SUGGESTED RECOMMENDATIONS, THE FINAL ROADWAY MITIGATION WILL BE DECIDED BY TOWN AND COUNTY HIGHWAY OFFICIALS AND INCLUDED IN A ROAD USE AGREEMENT WITH THE WIND PROJECT DEVELOPER, CASSDAGA WIND, LLC

NOTE 2: REFER TO MAP OF POTENTIAL ROADWAY IMPROVEMENTS AND INTERSECTION IMPROVEMENTS FOR POTENTIAL ROADWAY IMPROVEMENT LOCATIONS

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APPENDIX H

CASSADAGA WIND PROJECT

POTENTIAL ROADWAY IMPROVEMENT TABLE (CONTINUED)

POTENTIAL ACCESS ROUTE ROADS NEEDING IMPROVEMEMT	FROM	TO	TOWN(S)	LENGTH (MI)	ACCESS ROUTE	TYPE	TEMPORARY ROADWAY IMPROVEMENT **SEE NOTE 1 BELOW**	PERMANENT ROADWAY IMPROVEMENT **SEE NOTE 1 BELOW**	COMMENTS **(SEE NOTE 2 BELOW)**
SOUTH HILL RD	CR 72 CASSADAGA RD	DYBKAS RD	VILLENOVA	1.5	5 THRU 8	A	SINGLE COURSE ASPHALT OVERLAY FOR NORTHERN SEGMENT, MONITOR FOR SOUTHERN SEGMENT	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	ROAD POSTED FOR 6 TON LIMIT (SEASONAL FROM DYBKAS RD TO CR 72), CONDITION RATING POOR FOR NORTHERN HALF OF ROAD
PLANK RD	DYBKAS RD	CR 85 FARNGTN. HOLLOW RD	CHERRY CREEK	2.2	5 THRU 8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	ROAD POSTED FOR 6 TON LIMIT (SEASONAL FROM DYBKAS RD TO CR 85), CONDITION RATING GOOD
WEAVER RD	PLANK RD	TURBINE LOC. T23/T17/T14/T5	CHERRY CREEK	0.6	5	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING FAIR
CR 85 FARRINGTON HOLLOW RD	PLANK RD	BOUTWELL HILL RD	CHERRY CREEK	1.3	6 THRU 8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING GOOD
BOUTWELL HILL RD	CR 85 FARNGTN. HOLLOW RD	CLELAND RD	CHARLOTTE/CHERRY CREEK	3.7	6 THRU 8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	ROAD POSTED FOR 6 TON LIMIT (SEASONAL FROM EAST RD TO CR 85), CONDITION RATING FAIR
				2.1		G	8" GRAVEL FOR GRAVEL SECTION	GRADE & ADD 3" GRAVEL	
EAST RD	TURBINE LOC. T52/T50	TURBINE LOC. T41	CHARLOTTE	0.7	7	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING FAIR
CLELAND RD	SUB STATION/STAGING AREA	CR 66 THORNTON ROAD	CHARLOTTE/CHERRY CREEK	0.8	7, 8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	ROAD POSTED FOR 5 TON LIMIT, CONDITION RATING FAIR
				0.4		G	8" GRAVEL FOR GRAVEL SECTION	GRADE & ADD 3" GRAVEL	
CR 85 ERWIN RD	CR 66 THORNTON RD	TURBINE LOC. T37/T12/T18/T27/T9/T2/T1/T6/ T24/T22	CHERRY CREEK	1.2	8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING GOOD

ABBREVIATIONS: A - ASPHALT G - GRAVEL LOC. - LOCATION T&L - ASPHALT TRUING & LEVELING COURSE UTIL. - UTILITY

NOTE 1: THE POTENTIAL ROADWAY IMPROVEMENTS IN THE TABLE ARE ONLY SUGGESTED RECOMMENDATIONS, THE FINAL ROADWAY MITIGATION WILL BE DECIDED BY TOWN AND COUNTY HIGHWAY OFFICIALS AND INCLUDED IN A ROAD USE AGREEMENT WITH THE WIND PROJECT DEVELOPER, CASSDAGA WIND, LLC

NOTE 2: REFER TO MAP OF POTENTIAL ROADWAY IMPROVEMENTS AND INTERSECTION IMPROVEMENTS FOR POTENTIAL ROADWAY IMPROVEMENT LOCATIONS

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APPENDIX H

CASSADAGA WIND PROJECT

POTENTIAL ROADWAY IMPROVEMENT TABLE (CONTINUED)

POTENTIAL ACCESS ROUTE ROADS NEEDING IMPROVEMEMT	FROM	TO	TOWN(S)	LENGTH (MI)	ACCESS ROUTE	TYPE	TEMPORARY ROADWAY IMPROVEMENT **SEE NOTE 1 BELOW**	PERMANENT ROADWAY IMPROVEMENT **SEE NOTE 1 BELOW**	COMMENTS **(SEE NOTE 2 BELOW)**
CR 66 THORNTON RD	CLELAND ROAD	CR 85 ERWIN RD	CHARLOTTE/CHERRY CREEK	2.2	8	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING FAIR
MOON RD	CR 71	NY 60	STOCKTON	0.2	N/A	A	MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS	T&L AND OIL & STONE OVERLAY FOR REPAIRED/DAMAGED AREAS	CONDITION RATING FAIR
ALTERNATE ACCESS ROUTE ROADS NEEDING IMPROVEMEMT	***NOTE - ALTERNATE ACCESS ROUTE LOCATIONS NOT SHOWN ON THE MAP OF ROADWAY/INTERSECTION IMPROVEMENTS***								
HOOKER RD	*CR 75 NELSON RD*	*HALL RD*	*CHARLOTTE*	*1.1*	*2*	*A*	*MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS*	*T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS*	*CONDITION RATING GOOD*
CASSADAGA RD	*NORTH HILL ROAD*	*CR 77 ROOD RD*	*CHARLOTTE*	*1.4*	*4*		*MONITOR DURING CONSTRUCTION AND MAKE ANY NECESSARY ASPHALT REPAIRS*	*T&L AND SINGLE COURSE ASPHALT OVERLAY FOR REPAIRED/DAMAGED AREAS*	*CONDITION RATING VERY GOOD (NEW)*

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NOTE 1: THE POTENTIAL ROADWAY IMPROVEMENTS IN THE TABLE ARE ONLY SUGGESTED RECOMMENDATIONS, THE FINAL ROADWAY MITIGATION WILL BE DECIDED BY TOWN AND COUNTY HIGHWAY OFFICIALS AND INCLUDED IN A ROAD USE AGREEMENT WITH THE WIND PROJECT DEVELOPER, CASSDAGA WIND, LLC

NOTE 2: REFER TO MAP OF POTENTIAL ROADWAY IMPROVEMENTS AND INTERSECTION IMPROVEMENTS FOR POTENTIAL ROADWAY IMPROVEMENT LOCATIONS

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APPENDIX H

CASSADAGA WIND PROJECT

INTERSECTION IMPROVEMENT TABLE

POTENTIAL ACCESS ROUTE ROADS WITH INTERSECTIONS NEEDING IMPROVEMEMT	FROM	TO	TOWN(S)	LENGTH (MI)	ACCESS ROUTE	TYPE	POTENTIAL INTERSECTION IMPROVEMENT LOCATION	TEMPORARY INTERSECTION IMPROVEMENT **SEE NOTE 1 BELOW**	PERMANENT INTERSECTION IMPROVEMENT **SEE NOTE 1 BELOW**	INTERSECTION LOCATION NUMBER **SEE NOTE 2 BELOW**
ROBERTS RD	NY 60	CR 75 NELSON RD	CHARLOTTE	0.5	1	G	ROBERTS RD/NY 60	WIDEN NE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	5
							ROBERTS RD/CR 75	WIDEN SW CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	6
ANDREWS RD	CR 75 NELSON RD	TURBINE LOC. T36	CHARLOTTE	0.6	1	G	ANDREWS RD/CR 75	WIDEN NW/SW CORNERS W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	7
CR 72 BARD RD/CASSADAGA RD	NY 60	SOUTH HILL RD	POMFRET/ARKWRIGHT/ VILLENNOVA	9.7	2 THRU 8	A	CR 72/NY 60	NE CORNER ACCESS ROAD W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	1
HALL RD	CR 72 BARD RD	TURBINE LOC. T38/T43/T33	ARKWRIGHT/CHARLOTTE	4.6	2, 3	A, G	HALL RD/CR 72	WIDEN SW CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	2
CASSADAGA RD	HALL RD	NORTH HILL RD	CHARLOTTE	1.1	3	A	CASSADAGA/HALL	WIDEN NE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	8
							CASSADAGA /NORTH HILL	WIDEN NW/SW CORNERS W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	9
CR 77 ROOD RD	CR 72 BARD RD	RUTTENBUR RD	ARKWRIGHT	1	4	A	CR 77 ROOD RD/CR 72	WIDEN SW CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	3
COOK RD	CR 77 ROOD RD	LEWIS RD	CHARLOTTE	0.7	4	G	COOK RD/CR 77	WIDEN NE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	10
							COOK RD/LEWIS RD	WIDEN SW CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	11
LEWIS RD	COOK RD	MILL CR RD	CHARLOTTE	1.5	4	G	LEWIS RD/MILL CREEK RD	WIDEN SE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	12
WEAVER RD	PLANK RD	TURBINE LOC. T23/T17/T14/T5	CHERRY CREEK	0.6	5	A	WEAVER RD/PLANK RD	WIDEN NE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	13
SOUTH HILL RD	CR 72 BARD RD	DYBKAS RD	VILLENOVA	1.5	5 THRU 8	A	SOUTH HILL/CR 72	SW CORNER ACCESS ROAD W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	4
PLANK RD	DYBKAS RD	CR 85 FARNGTN. HOLLOW RD	CHERRY CREEK	2.2	6 THRU 8	A	PLANK RD/CR 85	WIDEN SE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	14
BOUTWELL HILL RD	CR 85 THORNTON RD	CLELAND RD	CHARLOTTE/CHERRY CREEK	5.8	6 THRU 8	A, G	BOUTWELL HILL/CR 85	SW CORNER ACCESS ROAD W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	15
CLELAND RD	SUB STATION/STAGING AREA	CR 66 THORNTON ROAD	CHARLOTTE/CHERRY CREEK	1.3	7, 8	A, G	CLELAND/BOUTWELL HILL	WIDEN SE/NE CORNERS W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	16
					8		CLELAND/THORNTON	WIDEN NE CORNER W/12" GRAVEL	ADD 2" TOPSOIL AND SEED	17
ALTERNATE ACCESS ROUTE ROADS NEEDING IMPROVEMEMT	***NOTE - ALTERNATE ACCESS ROUTE LOCATIONS WITH INTERSECTION IMPROVEMENTS ARE NOT SHOWN ON THE MAP OF ROADWAY/INTERSECTION IMPROVEMENTS***									
HOOKER RD	*CR 75 NELSON RD*	*HALL RD*	*CHARLOTTE*	*1.1*	*2*	*A*	*HOOKER RD/CR 75*	*WIDEN NE CORNER W/12" GRAVEL*	*ADD 2" TOPSOIL AND SEED*	*N/A*
							HOOKER RD/HALL RD	*WIDEN SW CORNER W/12" GRAVEL*	*ADD 2" TOPSOIL AND SEED*	*N/A*
CASSADAGA RD	*NORTH HILL ROAD*	*CR 77 ROOD RD*	*CHARLOTTE*	*1.4*	*4*	*A*	*CASSADAGA RD/CR 77*	*WIDEN SW CORNER W/12" GRAVEL*	*ADD 2" TOPSOIL AND SEED*	*N/A*

ABBREVIATIONS: A - ASPHALT G - GRAVEL LOC. - LOCATION T&L - ASPHALT TRUING & LEVELING COURSE
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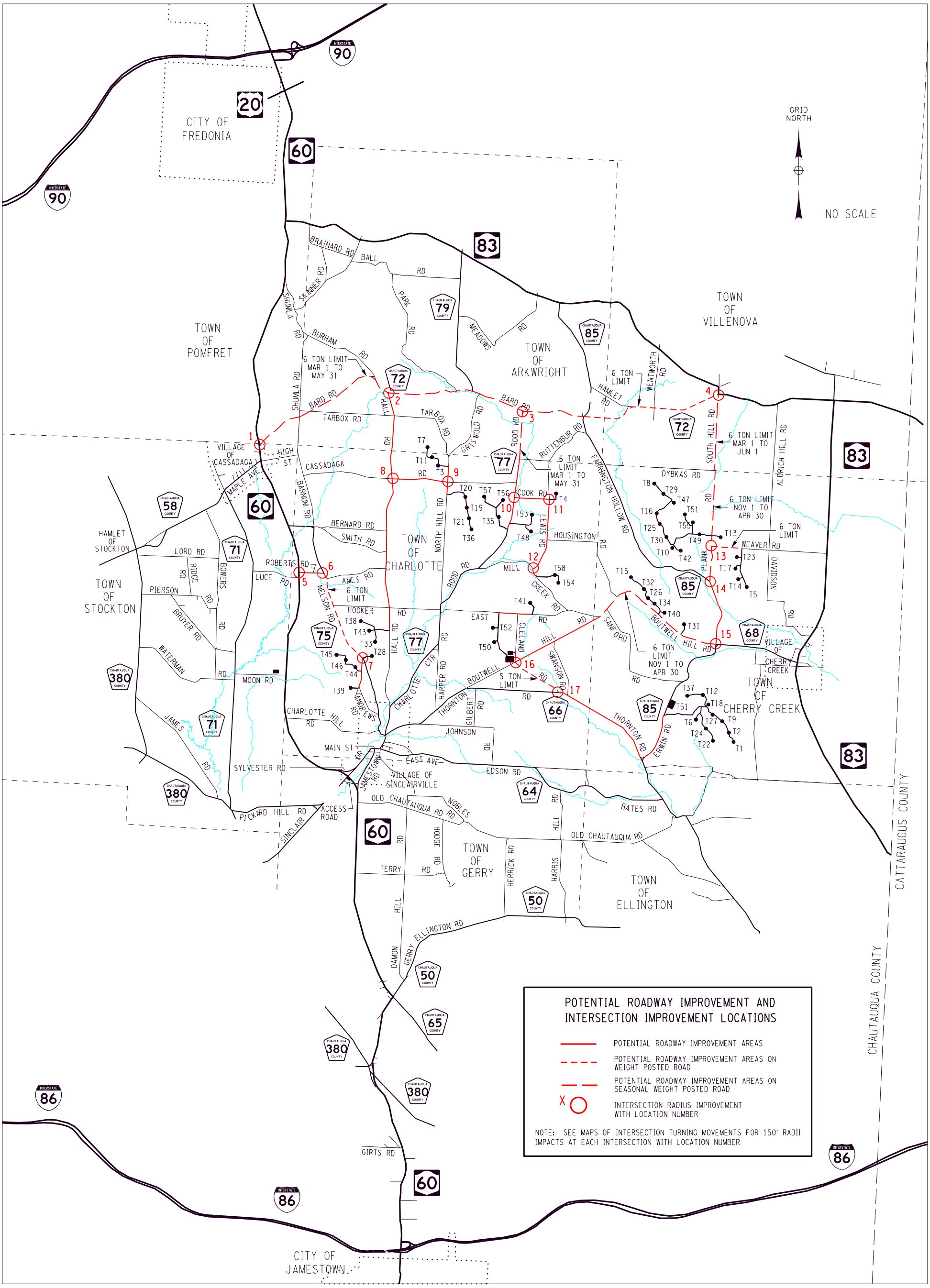
NOTE 2: REFER TO MAP OF POTENTIAL ROADWAY IMPROVEMENT & INTERSECTION IMPROVEMENT LOCATIONS AND MAPS OF INTERSECTION TURNING MOVEMENTS FOR INTERSECTION LOCATIONS



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APPENDIX H

POTENTIAL ROADWAY IMPROVEMENT AND INTERSECTION IMPROVEMENT LOCATIONS

CASSADAGA WIND PROJECT

CHAUTAUQUA COUNTY

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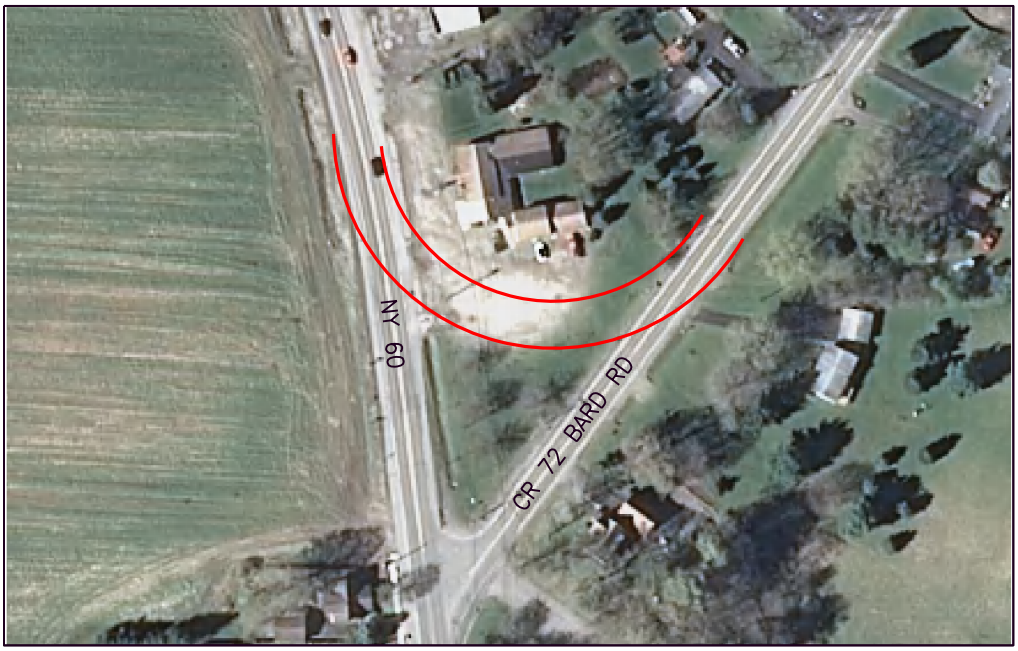

LOCATION 1 – STATE ROUTE 60 AT CR 72 BARD RD

LOCATION 2 – CR 72 BARD RD AT HALL RD

NOTE:

APPROXIMATE LOCATIONS ARE SHOWN FOR TRUCK TURNING MOVEMENTS. DEVELOPER NEEDS TO APPLY THE STANDARD TRUCK TURNING RADII IN ORDER TO VERIFY INTERSECTION IMPROVEMENTS REQUIRED.

TURNING MOVEMENT KEY

150' INSIDE RADIUS, 40.8' WIDTH TO ALLOW FOR TURNING MOVEMENT

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LOCATION 3 – CR 72 BARD RD AT CR 77 ROOD RD

LOCATION 4 – CR 72 CASSADAGA RD AT SOUTH HILL RD

NOTE:

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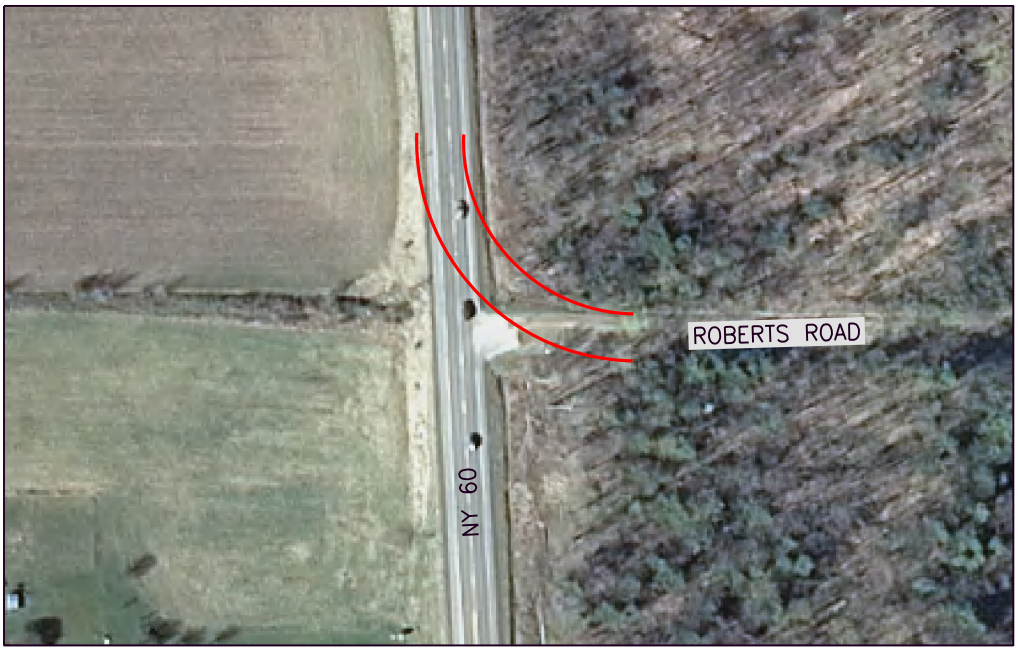
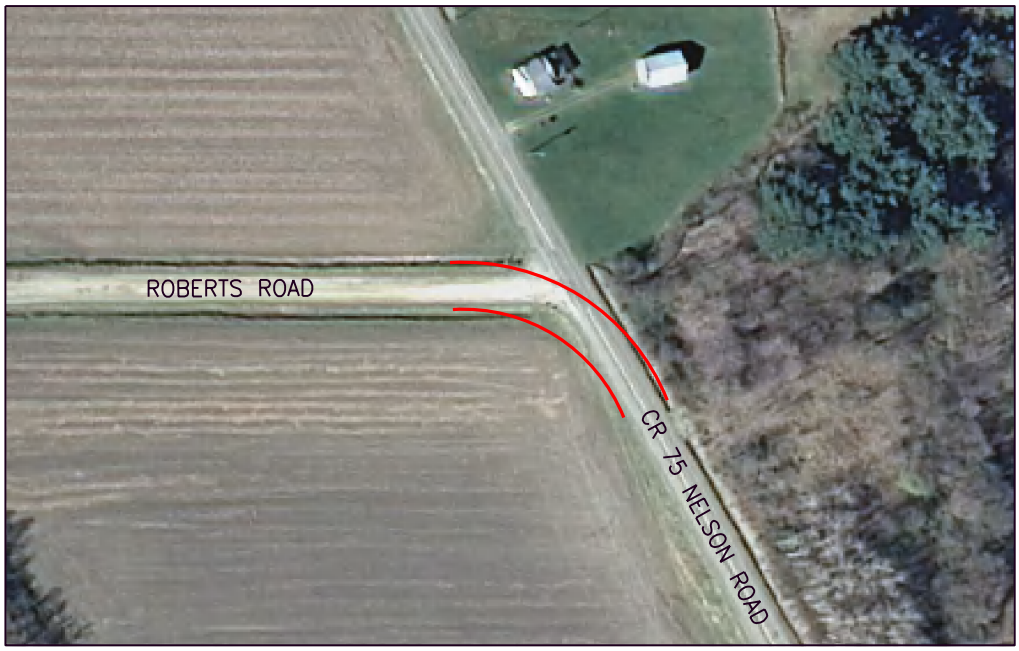


LOCATION 5 – STATE ROUTE 60 AT ROBERTS ROAD



LOCATION 6 – ROBERTS ROAD AT CR 75 NELSON ROAD

NOTE:

APPROXIMATE LOCATIONS ARE SHOWN FOR TRUCK TURNING MOVEMENTS. DEVELOPER NEEDS TO APPLY THE STANDARD TRUCK TURNING RADII IN ORDER TO VERIFY INTERSECTION IMPROVEMENTS REQUIRED.

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LOCATION 7 – CR 75 NELSON ROAD AT ANDREWS ROAD

LOCATION 8 – HALL ROAD AT CASSADAGA ROAD

NOTE:

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TURNING MOVEMENT KEY

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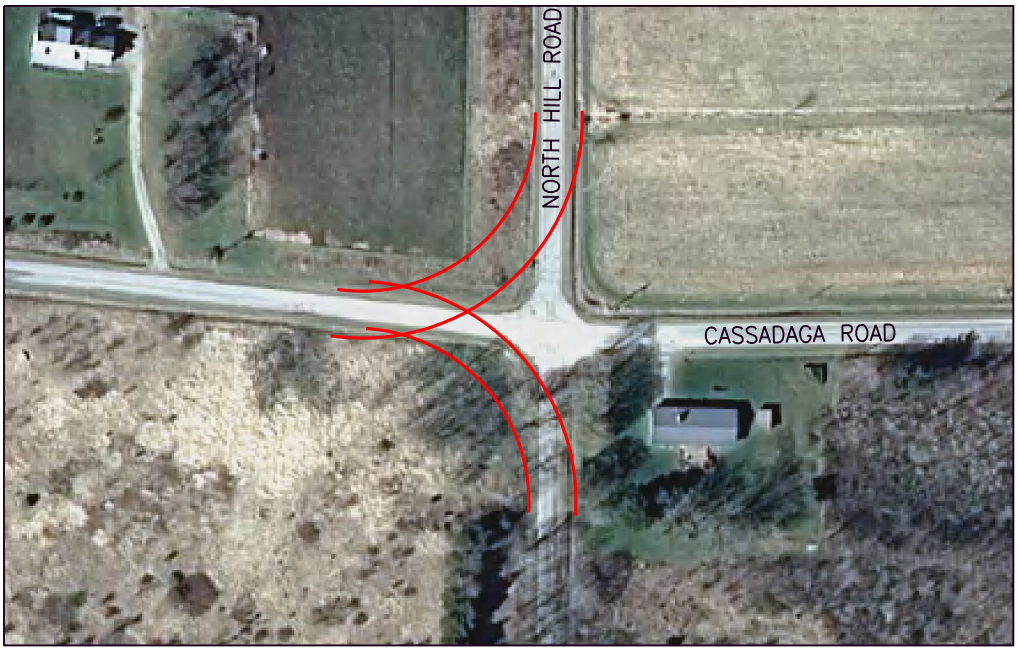

LOCATION 9 – NORTH HILL ROAD AT CASSADAGA ROAD

LOCATION 10 – CR 77 ROOD ROAD AT COOK ROAD

NOTE:

APPROXIMATE LOCATIONS ARE SHOWN FOR TRUCK TURNING MOVEMENTS. DEVELOPER NEEDS TO APPLY THE STANDARD TRUCK TURNING RADII IN ORDER TO VERIFY INTERSECTION IMPROVEMENTS REQUIRED.

TURNING MOVEMENT KEY

150' INSIDE RADIUS, 40.8' WIDTH TO ALLOW FOR TURNING MOVEMENT

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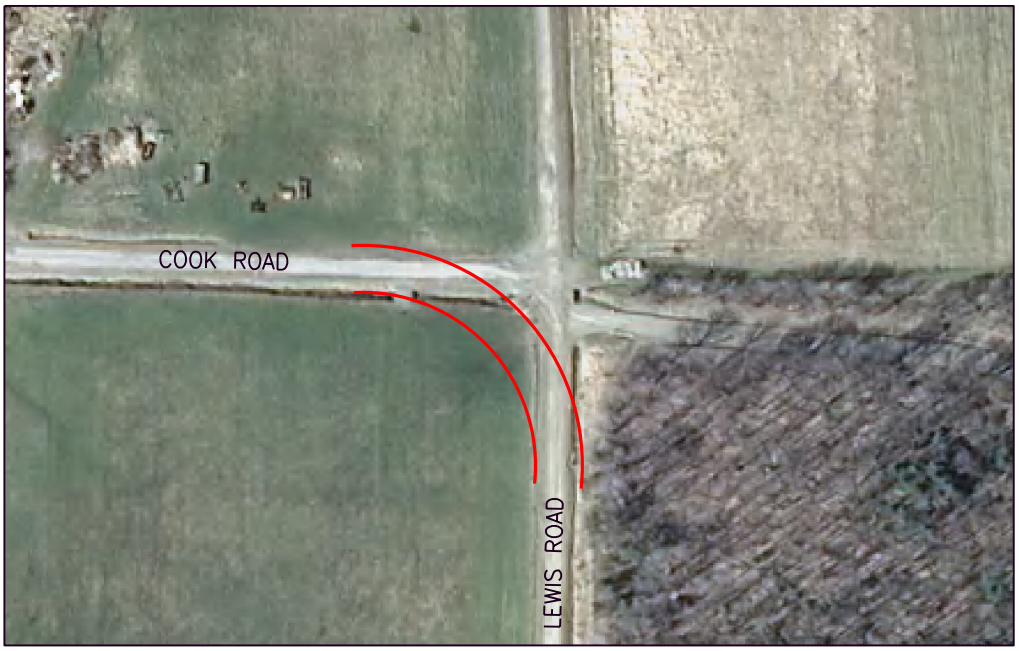

LOCATION 11 – COOK ROAD AT LEWIS ROAD

LOCATION 12 – MILL CREEK ROAD AT LEWIS ROAD

NOTE:

APPROXIMATE LOCATIONS ARE SHOWN FOR TRUCK TURNING MOVEMENTS. DEVELOPER NEEDS TO APPLY THE STANDARD TRUCK TURNING RADII IN ORDER TO VERIFY INTERSECTION IMPROVEMENTS REQUIRED.

TURNING MOVEMENT KEY

150' INSIDE RADIUS, 40.8' WIDTH TO ALLOW FOR TURNING MOVEMENT

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LOCATION 13 – PLANK ROAD AT WEAVER ROAD

LOCATION 14 – CR 85 FARRINGTON HOLLOW ROAD AT PLANK ROAD

NOTE:

APPROXIMATE LOCATIONS ARE SHOWN FOR TRUCK TURNING MOVEMENTS. DEVELOPER NEEDS TO APPLY THE STANDARD TRUCK TURNING RADII IN ORDER TO VERIFY INTERSECTION IMPROVEMENTS REQUIRED.

TURNING MOVEMENT KEY

150' INSIDE RADIUS, 40.8' WIDTH TO ALLOW FOR TURNING MOVEMENT

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LOCATION 15 – CR 85 FARRINGTON HOLLOW ROAD AT BOUTWELL HILL ROAD

LOCATION 16 – BOUTWELL HILL ROAD AT CLELAND ROAD

NOTE:

APPROXIMATE LOCATIONS ARE SHOWN FOR TRUCK TURNING MOVEMENTS. DEVELOPER NEEDS TO APPLY THE STANDARD TRUCK TURNING RADII IN ORDER TO VERIFY INTERSECTION IMPROVEMENTS REQUIRED.

TURNING MOVEMENT KEY

150' INSIDE RADIUS, 40.8' WIDTH TO ALLOW FOR TURNING MOVEMENT

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LOCATION 17 – CR 66 THORNTON ROAD AT CLELAND ROAD

NOTE:

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APPENDIX I

Table of Construction Vehicle Volumes

Maps of Construction Vehicle Routes/Volumes

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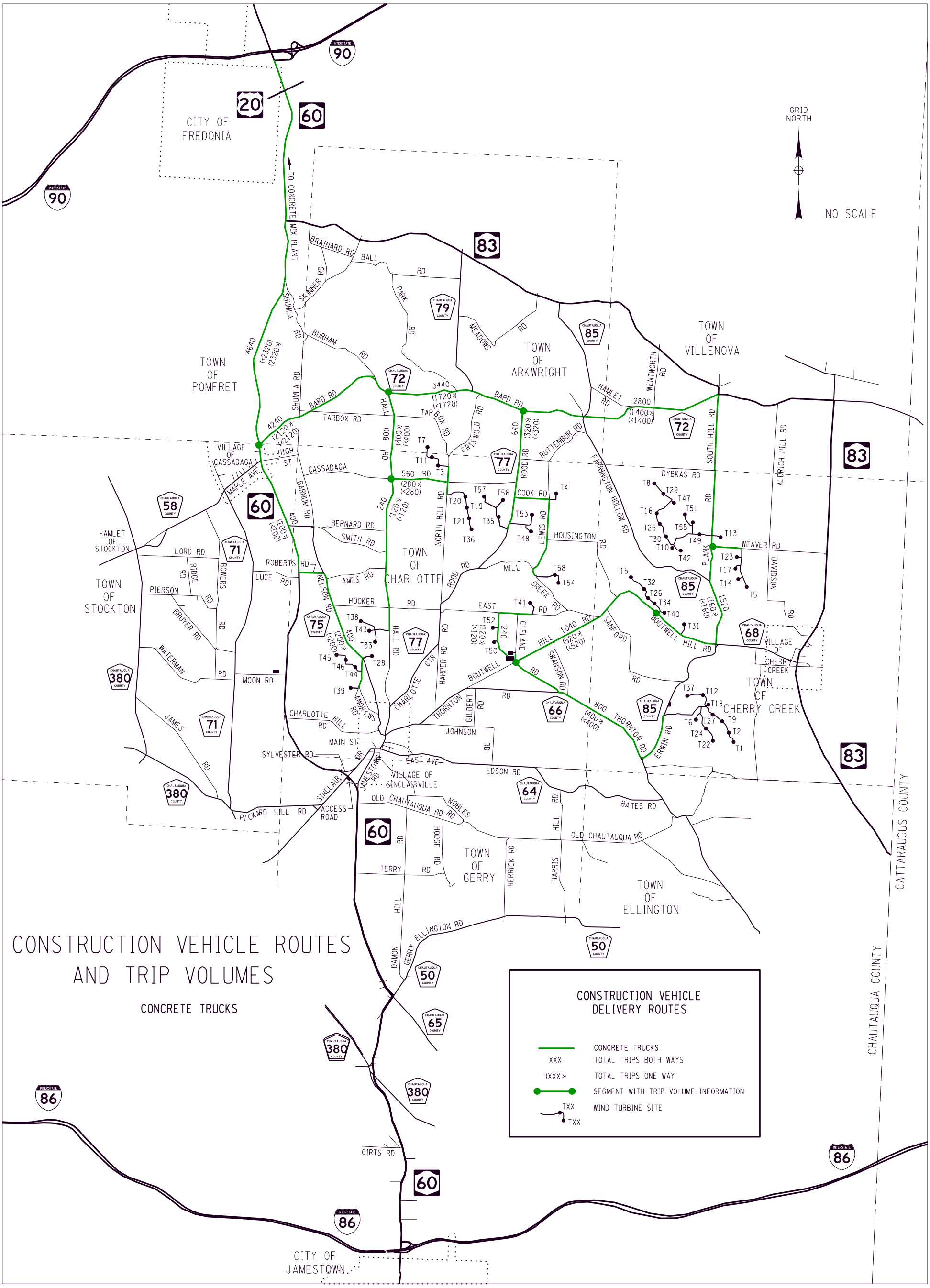
APPENDIX I

CASSADAGA WIND PROJECT

CONSTRUCTION VEHICLE VOLUMES

CONSTRUCTION ROUTES	GRAVEL CY	GRAVEL TRUCK VOLUME	CONCRETE MIX CY	CONCRETE TRUCK VOLUME	NO. OF TURBINES PER ACCESS ROUTE	TURBINE DELIVERY FLATBED TRUCKS VOLUME	CRANE VOLUME
ACCESS ROUTE #1	2451	245	2000	200	5	45	10
ACCESS ROUTE #2	2389	239	1200	120	3	27	6
ACCESS ROUTE #3	4321	432	2800	280	7	63	14
ACCESS ROUTE #4	6827	683	3200	320	8	72	16
ACCESS ROUTE #5	10677	1068	6400	640	16	144	32
ACCESS ROUTE #6	3167	317	2400	240	6	54	12
ACCESS ROUTE #7	3107	311	1200	120	3	27	6
ACCESS ROUTE #8	7232	724	4000	400	10	90	20
	0	0	0	0	0	0	0
VOLUME TOTALS		4019		2320	58	522	116



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APPENDIX I

CONSTRUCTION VEHICLE ROUTES AND TRIP VOLUMES
CONCRETE TRUCKS

CASSADAGA WIND PROJECT
CHAUTAUQUA COUNTY

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
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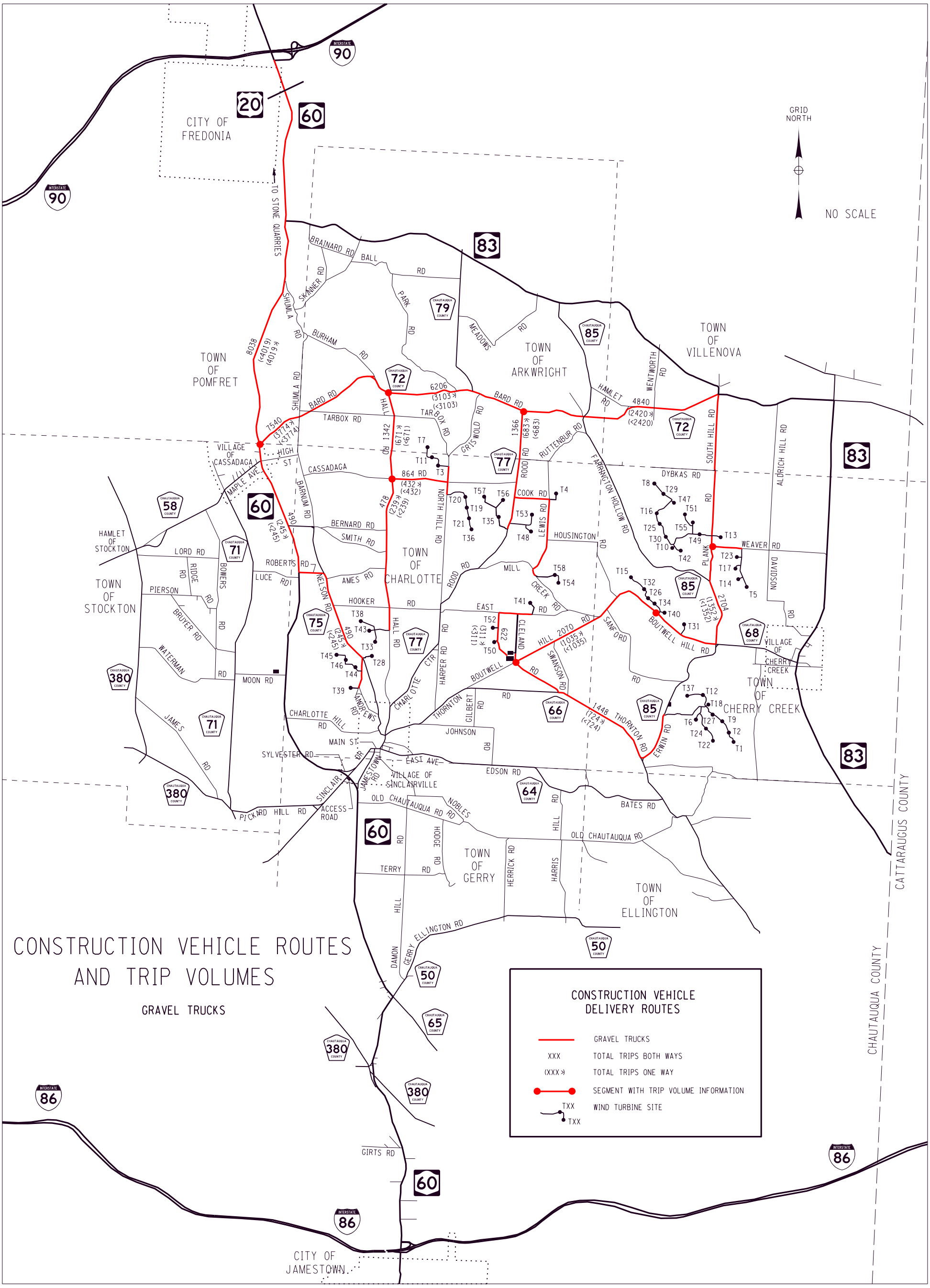

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CASSADAGA WIND PROJECT
CHAUTAUQUA COUNTY

CONSTRUCTION VEHICLE ROUTES AND TRIP VOLUMES
GRAVEL TRUCKS

APPENDIX I

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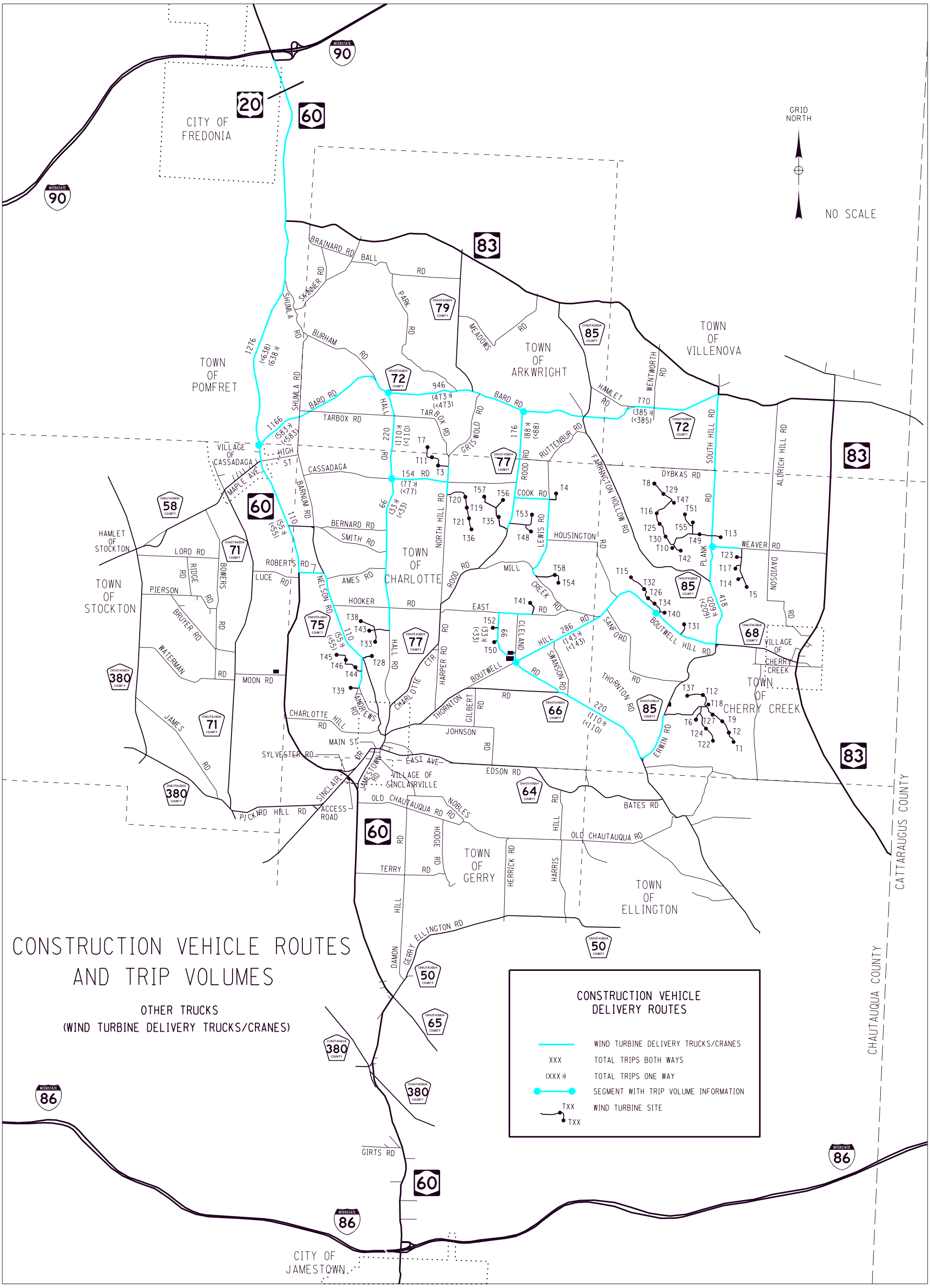

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APPENDIX I

CONSTRUCTION VEHICLE ROUTES AND TRIP VOLUMES
OTHER TRUCKS

CASSADAGA WIND PROJECT
CHAUTAUQUA COUNTY

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APPENDIX J

Table of Bridge Rating Information

Table of Culvert Locations

Map of Existing Bridge & Traffic Signal Locations

C&S COMPANIES

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APPENDIX J

CASSADAGA WIND PROJECT

BRIDGE RATING INFORMATION TABLE

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	BIN NO(S).	FEATURE CROSSED	LOCATION	FLAGGED BRIDGE	POSTED BRIDGE	HS INVENTORY RATING		HS OPERATING RATING		CONDITION RATING **SEE NOTE BELOW**	INSPECTION DATE **SEE NOTE BELOW**	SUFFICIENCY RATING	YEAR BUILT	NO. OF SPANS	SPAN LENGTH	NYSDOT WIDTH RESTRICT.	COMMENTS **(SEE NOTES BELOW)**	POTENTIAL ACCESS ROUTE NUMBERS
NY 60	I-90 RAMP	NY 83 LAONA	3.2	POMFRET	BIN 1027880	DUTCH HOLLOW CR	RM 60 5201 3222		NO	HS 30	54 T	HS 51	91 T	4.80*	7/15/2015*	80.2	1931	1	25.9'	33' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	1 THRU 8
NY 60	NY 83 LAONA	CR 58/MAPLE AVE	4.9	POMFRET/STOCKTON	BIN 1027870	CANADAWAY CR	RM 60 5201 3209		NO	HS 53	95 T	HS 88	158 T	5.86*	7/15/2015*	89	1993	1	162.7'	46' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	1 THRU 8
NY 60	CR 58/MAPLE AVE	SYLVESTER RD	6.9	STOCKTON/CHARLOTTE/GERRY	BIN 1027860	PICKETT BROOK	RM 60 5201 3155		NO	HS 38	68 T	HS 51	91 T	6.72*	10/30/2014*	98	1998	1	59'	40' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	1
					BIN 1027850	BR. CASSADAGA CR	RM 60 5201 3132		NO	HS 28	51 T	HS 47	85 T	5.03*	5/11/2015*	95	1955	1	26'	36' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
NY 60	SYLVESTER RD	CR 50 & 65	4.8	GERRY	BIN 1027840	CR 66 SINCLAIR DR	RM 60 5201 3100		NO	HS 29	52 T	HS 48	87 T	6.91*	4/27/2015*	90.1	2007	1	117'	39' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 1027830	MILL CREEK	RM 60 5201 3099		NO	HS 42	76 T	HS 71	128 T	6.12*	7/22/2015*	89	1995	1	146'	38' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
NY 60	CR 50 & 65	CR 380	1.6	GERRY/ELLICOTT	BIN 1027820	HATCH CR	RM 60 5201 3055		NO	HS 19	35 T	HS 46	83 T	5.87*	6/22/2015*	96.9	1974	2	16' ea	46' - 0"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
					BIN 1027810	CASSADAGA CR	RM 60 5201 3044		NO	HS 18	32 T	HS 41	74 T	5.87*	7/23/2015*	94.1	1961	3	28' ea	36' - 0"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
					BIN 1027800	BR. CASSADAGA CR	RM 60 5201 3039		NO	HS 19	34 T	HS 32	58 T	4.61*	7/29/2015*	90.3	1951	1	32'	34' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 1027790	CTY. ROUTE 380 (81)	RM 60 5201 3038		NO	HS 30	54 T	HS 50	90 T	5.77*	6/25/2015*	82.4	1951	1	95'	38' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM, REHAB in 1992	
NY 60	CR 380	I-86 RAMP	3.6	ELLICOTT	BIN 1027780	MOON BROOK	RM 60 5201 3010		NO	HS 37	66 T	HS 60	108 T	6.39*	8/21/2014*	84	1946	1	32'	38' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM, REHAB in 1998	
					BIN 1091951	I-86 WB OVER	RM 3002/NY 60 UNDER I-86		NO											54' UNDER	TOTAL H.C. UNDER - 54', MIN. V.C. 14', MAX V.C. 15'	
					BIN 1091952	I-86 EB OVER	RM 3002/NY 60 UNDER I-86		NO											54' UNDER	TOTAL H.C. UNDER - 54', MIN. V.C. 15', MAX V.C. 16'	
CR 72 BARD RD	NY 60	CR 79 CENTER RD	4.8	POMFRET/ARKWRIGHT	BIN 3323440	CANADAWAY CR	0.4 MI WEST OF GRISWOLD RD		NO	HS 25	45 T	HS 40	72 T	7*	11/09/2015*	71.2	1931	1	47'	27' - 7"	REPLACED IN 2013?,HS/SUFF. RATING FROM NAT. BRDG. INV. DATA	4 THRU 8
CR 72 BARD RD	CR 79 CENTER RD	CR 85 FARNGTN. RD	2.1	ARKWRIGHT	NONE																	
CR 72 BARD RD/CASSADAGA RD	CR 85 FARNGTN. RD	SOUTH HILL RD	2.8	ARKWRIGHT/VILLENOVA	BIN 3325950	TB WB CONEWNGO CR	0.5 MI EAST OF FARRNGTN. H. RD		NO	HS 19	35 T	HS 44	79 T	5.05*	6/3/2015*	84.9	1931	2	11' ea	22' - 0"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	5 THRU 8
					BIN 3325860	TB WB CONEWNGO CR	0.3 MI WEST OF HAMLET RD		NO	HS 31	55 T	HS 43	77 T	6.43*	11/6/2014*	96.9	2010	1	44'	27' - 7"	REPLACED IN 2010, HS/SUFF. RATING FROM NAT. BRDG. INV. DATA	5 THRU 8
					BIN 3325930	TB WB CONEWNGO CR	0.8 MI WEST OF SOUTH HILL RD		NO	HS 38	69 T	HS 64	115 T	6.80*	6/2/2015*	98.9	1931	1	23'	28' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM, REHAB IN 1999	5 THRU 8
TARBOX RD	CR 72 BARD RD	GRISWOLD RD	3.2	ARKWRIGHT	NONE																	
SHUMLA RD/BARNUM RD	CR 72 BARD RD	HIGH ST	0.7	POMFRET/STOCKTON	NONE																	
HIGH ST	NY 60	BARNUM RD	0.7	STOCKTON	NONE																	
MOON RD	CR 71	NY 60	1	STOCKTON	NONE																	
CR 75 NELSON RD	NY 60	BARNUM RD	1	STOCKTON/CHARLOTTE	BIN 3323870	PICKETT BROOK	1.2 MI SE OF CASSADAGA		NO	HS 34	62 T	HS 46	82 T	5.82*	8/5/2014*	90.2	2002	1	39'	25' - 4"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
CR 75 NELSON RD/WATER ST	BARNUM RD	CR 66/77 PARK ST	4.5	CHARLOTTE	BIN 3326170	MILL CREEK	VILLAGE OF SINCLAIRVILLE		NO	HS 29	52 T	HS 42	75 T	5.72*	8/12/2015*	95	1991	1	81'	29' - 5"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
SMITH RD	BARNUM RD	HALL RD	1.4	CHARLOTTE	NONE																	
BARNUM RD	HIGH ST	NELSON RD	1.5	CHARLOTTE	BIN 3323840	PICKETT BROOK	1.1 MI SE OF CASSADAGA		NO	HS 28	51 T	HS 43	77 T	7*	11/13/2014*	77.9	2012	1	37'	18' - 0"	REPLACED IN 2012, HS/SUFF. RATING FROM NAT. BRDG. INV. DATA	
CASSADAGA RD	BARNUM RD	CR 77 ROOD RD	4.2	CHARLOTTE	BIN 3323860	PICKETT BROOK	1.1 MI EAST OF CASSADAGA		NO	HS 24	44 T	HS 47	85 T	6.87*	5/26/2015*	99	2007	1	24'	25' - 1"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
HALL RD	CR 72 BARD RD	CR 77 CHARLOTTE CTR. RD	5.8	ARKWRIGHT	BIN 3326160	MILL CREEK	240' NORTH OF CHARLOTTE CTR RD		NO	HS 22	40 T	HS 37	66 T	4.68*	8/12/2015*	77	1965	1	64'	17' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM, REHAB IN 1985	
BERNARD RD	SMITH RD	HALL RD	1.3	CHARLOTTE	NONE																	
AMES RD	NELSON RD	HALL RD	1.2	CHARLOTTE	NONE																	
HOOKER RD	NELSON RD	CR 77 CHARLOTTE CTR. RD	1.1	CHARLOTTE	BIN 3323900	TRIB MILL CR	0.5 MI WEST OF CHARLOTTE CTR RD		YES, R POSTED	HS 15	27 T	HS 22	40 T	5.05*	9/22/2015*	90.7	1979	1	27'	29' - 10"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
CHAR. HILL RD/PROSPECT ST	NY 60	CR 75 WATER ST	1.9	CHARLOTTE	BIN 3326130	MILL CREEK	VILLAGE OF SINCLAIRVILLE		NO	HS 35	63 T	HS 59	107 T	7*	10/26/2015*	97	1978	2	39' ea	24' - 0"	REPLACED IN 2013, HS/SUFF. RATING FROM NAT. BRDG. INV. DATA	
ANDREWS RD	NELSON RD	WATER ST	1.3	CHARLOTTE	NONE																	
GRISWOLD RD	CR 72 BARD RD	NORTH HILL RD	1.5	ARKWRIGHT	BIN 3323400	CANADAWAY CR	100' SOUTH OF CR 72 BARD RD		NO	HS 33	59 T	HS 43	78 T	6.20*	4/23/2015*	93.5	1997	1	80'	22' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
NORTH HILL RD	GRISWOLD RD	CR 77 ROOD RD	2.9	CHARLOTTE	NONE																	
CR 66 SINCLAIR DR	MILL ST/MAIN ST	NY 60 AT ACCESS ROAD	0.8	GERRY/CHARLOTTE	BIN 3326140	MILL CREEK	100' SOUTH OF MAPLE ST		NO	HS 21	38 T	HS 36	64 T	4.92*	7/8/2015*	81.2	1959	1	78'	28' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 1027840	NY 60 OVERHEAD	CR 66 CROSSING UNDER NY 60		NO												TOTAL H.C. UNDER - 39', MIN. V.C. 16', MAX V.C. 17'	
SYLVESTER RD	NY 60	CR 66 SINCLAIR DR	0.3	GERRY	NONE																	
CR 77 ROOD RD	CR 72 BARD RD	HOOKER RD	4.6	ARKWRIGHT/CHARLOTTE	BIN 3323450	CANADAWAY CR	0.2 MI SOUTH OF CR 72 BARD RD		NO	HS 18	32 T	HS 44	80 T	4.39*	6/3/2015*	94	1933	2	15' ea	30' - 7"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
					BIN 3323810	MILL CREEK	0.7 MI NORTH OF CHARLOTTE CTR RD		NO	HS 31	55 T	HS 46	83 T	6.46*	9/22/2015*	97.8	2007	1	38'	27' - 7"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 3323800	MILL CREEK	0.2 MI NORTH OF CHARLOTTE CTR RD		NO	HS 33	60 T	HS 44	80 T	6.15*	9/15/2015*	98.8	1996	1	50'	29' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
CR 66/67 MAIN ST	SINCLAIR DR	CR 64 EAST AVE	0.1	CHARLOTTE	NONE																	
CR 77 JAMESTOWN ST	MAIN ST	NY 60	0.9	GERRY/CHARLOTTE	NONE																	
CR 77 PARK ST/CHARLOTTE CTR. RD	HOOKER RD	MAIN ST	3.1	CHARLOTTE	BIN 3323830	MILL CREEK	0.1 MI SOUTH OF HOOKER RD		NO	HS 28	51 T	HS 48	86 T	5.51*	9/15/2015*	91.5	1951	1	48'	26' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM, REHAB IN 2005	
					BIN 3323820	MILL CREEK	0.7 MI SOUTH OF HARPER RD		NO	HS 29	53 T	HS 48	86 T	6.66*	9/16/2015*	98.9	2009	1	46'	27' - 7"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 3323790	MILL CREEK	0.6 MI NORTH OF HALL RD		NO	HS 23	41 T	HS 40	72 T	4.88*	9/16/2015*	98.9	1988	1	68'	29' - 5"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
CR 66 KENT ST/THORNTON RD	CR 77 PARK ST	CR 64 BATES RD	6.8	CHARL./CHERRY CR/ELLINGTON	BIN 3324070	CLEAR CREEK	0.25 MI SOUTH OF CR 85 ERWIN RD		NO	HS 27	49 T	HS 46	82 T	5.56*	7/7/2015*	96.9	1986	1	39'	25' - 11"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 3324460	TRIB. CLEAR CREEK	0.1 MI NORTH OF BATES RD		NO	HS 32	58 T	HS 54	97 T	5.00*	4/22/2014*	99	1989	1	30'	28' - 2"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
CR 64 EAST AVE/EDSON RD/BATES RD	CR 66/77 PARK ST	CR 66 THORNTON RD	6	CHARLOTTE/GERRY/ELLINGTON	BIN 3324740	TRIB. CLEAR CREEK	0.1 MI EAST OF HARRIS HILL RD		NO	HS 32	57 T	HS 51	92 T	5.89*	9/2/2015*	93.5	1995	1	25'	24' - 1"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
					BIN 3324530	TRIB. CLEAR CREEK	0.6 MI WEST OF CR 66 THORNTON RD		NO	HS 31	55 T	HS 49	89 T	6.07*	8/4/2015*	99	2005	1	36'	27' - 0"	HS/SUFF. RATING FROM WINBOLTS PROGRAM	
COOK RD	CR 77 ROOD RD	LEWIS RD	0.7	CHARLOTTE	NONE																	
RUTTENBUR RD	CR 77 ROOD RD	CR 85 FARRNGTN. H. RD	1.6	ARKWRIGHT	NONE																	
LEWIS RD	RUTTENBUR RD	MILL CR RD	2.2	CHARLOTTE	NONE																	
MILL CR RD	CR 77 ROOD RD	EAST RD	2.3	CHARLOTTE	BIN 3323880	MILL CREEK	0.15 MI EAST OF CR 77 ROOD RD		NO	HS 31	55 T	HS 44	79 T	7*	9/9/2014*	100	2012	1	34'	23' - 10"	REPLACED IN 2012, HS/SUFF. RATING FROM NAT. BRDG. INV. DATA	
					BIN 3323890	MILL CREEK	0.2 MI WEST OF LEWIS RD		NO	HS 26	47 T	HS 44	79 T	6.56*	8/5/2014*	97	2008	1	25'	19' - 2"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
EAST RD	CR 77 CHARLOTTE CTR. RD	BOUTWELL HILL RD	3.2	CHARLOTTE	NONE																	
SWANSON RD	BOUTWELL HILL RD	CR 66 THORNTON RD	1.2	CHARLOTTE	NONE																	
CLELAND RD	EAST RD	CR 66 THORNTON RD	1.1	CHARLOTTE	NONE																	
C JOHNSON RD	BOUTWELL HILL RD	EAST AVE	2.2	CHARLOTTE	NONE																	
HARPER RD	CR 77 CHARLOTTE CTR. RD	BOUTWELL HILL RD	1.3	CHARLOTTE	NONE																	
GILBERT RD	CR 66 THORNTON RD	JOHNSON RD	0.7	CHARLOTTE	NONE																	
BOUTWELL HILL RD	CR 66 THORNTON RD	CR 85 ERWIN RD	5.8	CHARLOTTE/CHERRY CREEK	NONE																	
HOUSINGTON RD	LEWIS RD	EAST RD	2.2	CHARLOTTE/CHERRY CREEK	NONE																	
SANFORD RD	BOUTWELL HILL RD	CR 85 ERWIN RD	2.5	CHERRY CREEK	NONE																	
CR 85 FARRNGTN H. RD	CR 72 BARD RD	PLANK RD	4.6	ARKWRIGHT/CHERRY CREEK	NONE																	
CR 85 F. H. RD/ERWIN RD	PLANK RD	CR 66 THORNTON RD	4.3	CHERRY CREEK	BIN 3324120	BRANCH CHERRY CREEK	0.5 MI SOUTH OF BOUTWELL HILL RD		NO	HS 19	35 T	HS 47	85 T	5.93*	9/23/2015*	95.7	1993	1	25'	28' - 1"	HS/SUFF. RATING FROM NATIONAL BRIDGE INVENTORY DATA	
PLANK RD	DYBKAS RD/TOWN LINE	CR 85 FARRNGTN. H. RD	2.2	CHERRY CREEK	NONE																	
SOUTH HILL RD	CR 72 CASSADAGA RD	DYBKAS RD/TOWN LINE	1.5	VILLENOVA	NONE																	
WEAVER RD	PLANK RD	NY 83	2.3	CHERRY CREEK	NONE																	
ROBERTS RD	NY 60	CR 75 NELSON RD	0.5	CHARLOTTE	NONE																	

NOTE: HS RATINGS AND SUFFICIENCY RATINGS FROM THE 2010 WINBOLTS PROGRAM HAVE BRIDGE INSPECTION YEARS FROM 2008 TO 2010.
HS RATINGS AND SUFFICIENCY RATINGS FROM THE NATIONAL BRIDGE INVENTORY DATABASE HAVE BRIDGE INSPECTION YEARS FROM APPROXIMATELY 2012 TO 2013.
CONDITION RATINGS AND INSPECTION DATES WITH AN ASTERICK (*) ARE FROM THE LATEST NYSDOT STATE HIGHWAY BRIDGE DATA LIST FOR CHAUTAUQUA COUNTY DATED 12/31/2015, NO HS AND SUFF.
SUFFICIENCY RATINGS AVAILABLE ON THIS LIST.

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APPENDIX J

CASSADAGA WIND PROJECT

CULVERT LOCATION TABLE

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	CULVERT INFORMATION (INCLUDES BRIDGE LOCATIONS)	POTENTIAL ACCESS ROUTE NUMBERS
NY 60	I-90 RAMP	US 20	0.6	POMFRET	CULVERT 1: (+/-) 65' CURB TO CURB.	1 THRU 8
NY 60	US 20	NY 83 LAONA	2.6	POMFRET	CULVERT 1: GOOD CONDITION CORRUGATED RAIL, NON CONFORMING LENGTH. CULVERT 2 (C520146): 2'-3' COVER GOOD CONDITION, JUST NORTH OF EAGLE ST. CULVERT 3 (C520145): < 2' COVER GOOD CONDITION, JUST SOUTH OF STRAIGHT RD. BRIDGE (1027880): FAIR TO GOOD CONIDTION, SHOULDERS NARROW TO 4' S/W RIGHT SIDE.	1 THRU 8
NY 60	NY 83 LAONA	CR 58/MAPLE AVE	4.9	POMFRET/STOCKTON	CULVERT (C520144): SHALLOW COVER <2', GOOD CONDITION CULVERT 1: STEEL ARCH PIPE, RECENTLY OVERLAYED, SHOULDER EROSION/SETTLEMENT WITH NEW CORRUGATED RAIL. CULVERT (1077870) 2: GOOD CONIDTION, NON-CONFORMING BRIDGE RAIL. CULVERT 3: LARGE FILL OVER LARGE STREAM, GOOD CONDITION. CULVERT 4: LARGE FILL ON CURVE, GOOD CONDITION, CORRUGATED METAL PIPE. CULVERT 5: LARGE FILL, REINFORCED CONCRETE PIPE. CULVERT 6 (C520140): 10' CMP OR CORRUGATED PLATE ARCH, GOOD CONDITION.	1 THRU 8 (TO CR 72)
NY 60	CR 58/MAPLE AVE	SYLVESTER RD	6.9	STOCKTON/CHARLOTTE/GERRY	1027860: NO BIN PLATE, GOOD CONDITION, APPROACH SLABS CRACKED (MINOR), APPROACH PAVEMENT WHEEL RUTTING AND PATCHWORK. CULVERT 1: C520139: BOX CULVERT, HEADWALL SPALLED, PAVEMENT CRACKED AND PATCHED AT EDGE OF PAVEMENT. CULVERT 2: C520138: 2 CELL BOX, HEAVY (6"+) SPALLING HEADWALLS, APPROACH PAVEMENT CRACKED. 1077850: GOOD CONDITION, APPROACH PAVEMENT TRANSVERSE CRACKING. CULVERT 3: BOX CULVERT GOOD CONDITION, SOUTH OF LUCE ROAD. CULVERT 4: SMALL 18", GOOD CONDITION GOOD COVER SOUTH OF MOON RD. CULVERT 5: 4' CMP GOOD CONDITION 2'-3' FILL SOUTH OF CHARLOTTE HILL RD. CULVERT 6: GOOD CONDITION SOUTH OF CASSADAGA VALLEY MIDDLE SCHOOL.	1 (TO ROBERTS RD)
NY 60	SYLVESTER RD	CR 50 & 65	4.8	GERRY	1027840: GOOD CONDITION, MINOR APPROACH PAVEMENT CRACKING/PATCHWORK BRIDGE ON DOWNGRADE (HEADING SOUTH) WITH INTERSECTION JUST SOUTH OF BRIDGE. 1027830: GOOD CONDITION, MINOR APPROACH PAVEMENT CRACKING (ALLIGATOR). 1027820: GOOD CONDITION, NON CONFORMING BRIDGE RAIL AND TRANSITION, PAVEMENT CRACKING. NOTIBLE ITEMS: SMALL CROSS CULVERT SOUTH OF CHAUT. RD. FULL WIDTH CRACK ALONG PIPE RUN.	
NY 60	CR 50 & 65	CR 380	1.6	GERRY	1027810: NON-CONFORMING BRIDGE RAILING, WEARING SURFACE FAR, CRACKS AT DECK JOINT. 1027800: NON-CONFORMING BRDIGE RAILING AND TRANSITION, APPROACH SHOULDER SETTLEMENT. 1027790: NON-CONFORMING BRIDGE RAILING, DECK IS GOOD.	
NY 60	CR 380	GIRTS RD	1.6	ELLICOTT		
NY 60	GIRTS RD	I-86 RAMP	2	ELLICOTT		
CR 72 BARD RD	NY 60	SHUMLA RD	1	POMFRET/ARKWRIGHT		2 THRU 8
CR 72 BARD RD	SHUMLA RD	HALL RD	2.1	ARKWRIGHT	CULVERT 1; 18" CMP, 2-3' COVER, 38' OUT TO OUT, AT INTERSECTION OF HUMLA & BARNUM. CULVERT 2: 4' X 5' BOX, 1-2' COVER, 34' OUT TO OUT, APPROX. 3/4" PAST TARBOX RD. CULVERT 3: UNK. SIZE, APPEARS IN GOOD CONDITION, NO SIGNS OF CRACKING OR SETTLEMENT, APPROX. 10' W OF HALL RD. INTERSECTION.	2 THRU 8
CR 72 BARD RD	HALL RD	CR 79 CENTER RD	1.7	ARKWRIGHT	CULVERT 1: 3' x 3' BOX, 42' OUT TO OUT, 1'-3' OF COVER, 100' EAST OF HALL RD. CULVERT 2: 3' x 3' BOX, 6' COVER, 50' OUT TO OUT, 2000' E OF HALL RD. CULVERT 3: 3' x 3' BOX, 10'+ COVER, SCOUR @ INLET DUE TO DEBRIS BUILD UP, 50' OUT TO OUT, 3700' E OF HALL RD. CULVERT 4: 3' x 3' BOX, 10'+ COVER, 50' OUT TO OUT, 4000' EAST OF HALL RD. CULVERT 5: 5' x 4' BOX, 5' COVER, 50' OUT TO OUT, 5000' E OF HALL RD. CULVERT 6: 24" STEEL PIPE, 2'-3' OF COVER, 50' OUT TO OUT, 8000' EAST OF HALL RD. CULVERT 7: 2 x 18" STEEL PIPE, 5'-6' OF COVER, 50' OUT TO OUT, 500' WEST OF CR79.	4 THRU 8
CR 72 BARD RD	CR 79 CENTER RD	CR 85 FARNGTN. RD	2.3	ARKWRIGHT	NUMEROUS CULVERTS W/ SHALLOW COVER AND SHOULDER EROSION, UNPROTECTED ON RIGHT SIDE, 12' +/- TO BOTTOM OF DITCH. FOLLOWS ROAD FOR 1000-1500' ON SOUTH SIDE, APPROX. 500' +/- BEFORE BARD RD., CR 85 INTERSECTION. CULVERT 1: 24" STEEL, 1' COVER, 40' OUT TO OUT, @ INTERERSECTION OF CR 79 & BARD ROAD. CULVERT 2: 3' x 3' CONC. BOX, 1'-4' COVER, 40' OUT TO OUT, @ 1000' PAST GRISWOLD RD. CULVERT 3: 5' x 5' CONC. BOX, 8' COVERT, 32' RAIL TO RAIL, @ 1500' PAST GRISWOLD RD. CULVERT 4: 2' IRON PIPE, 2' COVER, 62' OUT TO OUT, 3/4 MI PAST GRISWOLD RD. CULVERT 5: 5' x 5' CONC. BOX, 1' COVER, 34' OUT TO OUT, 7/8 MI PAST GRISWOLD RD., 25-30° SKEW, NO GUIDERAIL. CULVERT 6: 24" STEEL PIPE, 1'-2' COVER, 40' OUT TO OUT, @ INTERSECTION OF ROOD RD. CULVERT 7: 8' x 5' CONCRETE BOX, 1' COVER, 115' OUT TO OUT, DIAGONAL ACROSS INTERSECTION OF FAR. HOLLOW/BARD RD.	4 THRU 8
TARBOX RD	CR 72 BARD RD	GRISWOLD RD	3.2	ARKWRIGHT	CULVERT 1: 36" HDPE, W/ 3'-5' COVER, 30' OUT TO OUT, 1500' EAST OF INTERSECTION OF HALL RD. POTHOLES AT CULVERT CROSSING. CULVERT 2: 36" CNP, W/ 2' COVER, 35' OUT TO OUT, APPROX. 300' FROM INTERSECTION HALL RD. CULVERT 3: 72" STEEL PLATE ARCH, 3'-4' COVER, 30' OUT TO OUT APPROX. 1/2 WAY BETWEEN BARD & HALL RDS.	
BARNUM RD	CR 72 BARD RD	HIGH ST	0.7	POMFRET/STOCKTON		
HIGH ST	NY 60	BARNUM RD	0.7	STOCKTON		
MOON RD	CR 71	NY 60	1	STOCKTON		
CR 75 NELSON RD	NY 60	BARNUM RD	1	STOCKTON/CHARLOTTE	BRIDGE (3323870): 2' SHOULDER APPROACH SETTLEMENT, CRACKING (SIGNIFICANT) AT BRIDGE ENDS.	1
CR 75 NELSON RD	BARNUM RD	CR 66/77 PARK ST	4.5	CHARLOTTE		1 (TO ANDREWS RD)
SMITH RD	BERNARD RD	HALL RD	1.4	CHARLOTTE	CULVERT 1: 24" HDPE, W/ LESS THAN 1' COVER, 30' OUT TO OUT, APPROX. 1/2 MI FROM INTERSECTION OF BERNARD RD.	
BARNUM RD	HIGH ST	NELSON RD	1.5	CHARLOTTE		

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APPENDIX J

CASSADAGA WIND PROJECT

CULVERT LOCATION TABLE (CONTINUED)

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	CULVERT INFORMATION (INCLUDES BRIDGE LOCATIONS)	POTENTIAL ACCESS ROUTE NUMBERS
CASSADAGA RD	BARNUM RD	HALL RD	4.2	CHARLOTTE	CULVERT 1: 3' CMP, STEEP SLOPES, APPROXIMATELY .25 MI FROM INTERSECTION W/ BARNUM RD., 34' TOTAL WIDTH TO STEEP SLOPE BOTH SIDES 10' COVER. CULVERT 2: 24" CMP, W/ 4' COVER, 34' OUT TO OUT (BEFORE STEEP SLOPES) 3/8 MI FROM INTERSECTION OF BARNUM RD. CULVERT 3: 36" CMP APPROX. 1/2 FROM INTERSECTION OF CASSADAGA & HALL RD., 2' COVER (+/-), 34' OUT TO OUT ASPHALT GOOD. BRIDGE (BIN 3323860): 26' RAIL TO RAIL, PAVEMENT & APPROACHES GOOD, BRIDGE IN BELLY OF BLIND CURVE, NON-CONFORMING GUIDERAL AND ASSYS.	
CASSADAGA RD	HALL RD	CR 77 ROOD RD		CHARLOTTE	CULVERT: 36" HDPE W/ 5' COVER, 40' OUT TO OUT, APPROXIMATELY .5 MI TO .75 MI FROM NORTH HILL (PAVEMENT RE-DONE IN AREA OF CULVERT).	3 (TO NORTH HILL RD)
HALL RD	CR 72 BARD RD	CHARLOTTE TOWN LINE	1.1	ARKWRIGHT		2 & 3
HALL RD	ARKWRIGHT TOWN LINE	CR 77 CHARLOTTE CTR. RD	5.1	CHARLOTTE	CULVERT 1: 36" HDPE W/ LESS THAN 1' COVER, 45' OUT TO OUT, TRANSVERSE CRACKING ALONG CL OF CULVERT APROXIMATELY AT PAVEMENT TRANSITION. CULVERT 2: 60" RIVETED STEEL PLATE, W/ 2' COVER, 38' OUT OUT, APPROXIMATELY 1 MI FROM TARBOX RD. INTERSECTION. CULVERT 3: 1' STEEL PIPE W/ 3' COVER, 28' OUT TO OUT, NEAR PAVEMENT TRANSITION. CULVERT 4: 48" RCP, W/ 2' COVER 30' OUT TO OUT, APPROXIMATELY 500' (+/-) NORTH OF CASSADAGA RD. INTERSECTION.	2 (TO T38,T43,T33 LOC.) & 3 (TO CASSADAGA RD)
BERNARD RD	SMITH RD	HALL RD	1.3	CHARLOTTE	CULVERT 1: 18" CMP, 1' COVER, 24' OUT TO OUT, @ INTERSECTION OF SMITH ROAD. CULVERT 2: 18" HDPE, W/ 1'-2' COVER, 36' OUT TO OUT APPROX. 1000' FROM HALL RD. INTER. PAVEMENT SETTLEMENT ALONG CL OF CULVERT. CULVERT 3: 18" HDPE, W/ 2'-3' COVER, 30' OUT TO OUT, APPROX. 1500' FROM HALL RD., SETTLED @ CROSSING. CULVERT 4: 24" HDPE W/ 2', COVER 30' OUT TO OUT, APPROXIMATELY 2000' FROM HALL RD. CULVERT 5: 48" STEEL, W/ 8' COVER ON 60° (+/-) SKEW, APPROXIMATELY 500' FROM SMITH RD., 29' RAIL TO RAIL.	
AMES RD	NELSON RD	HALL RD	1.2	CHARLOTTE	CULVERT 1: 24" HDPE, W/ 1'-2' COVER, 28' OUT TO OUT, DOWNSTREAM SHOULDER ERODED, ROAD REPAIRED. CULVERT 2: 72" CMP W/ 4' COVER, 40' OUT TO OUT, UPSTREAM SIDE HAS ERODED, TRANSVERSE CRACK AT CROSSING.	
HOOKER RD	NELSON RD	CR 77 CHARLOTTE CTR. RD	1.1	CHARLOTTE	CULVERT 1: 12", W/ 2' OF COVER AND 30' OUT TO OUT DIMENSION, APPROXIMATELY 1500' FROM HALL/HOOKER INTERSECTION (RCP). BRIDGE (3323930): W/ TIMBER RAILING, 30' RAIL TO RAIL, APPROX. 1000' FROM HALL/HOOKER INTERSECTION W/ MINOR APPROACH SETTLEMENT.	
PROSPECT ST/ CHARLOTTE HILL RD	NY 60	CR 75 WATER ST	1.9	CHARLOTTE	3326130: 26' RAIL TO RAIL. CULVERT: 24 HDPE, 5' COVER, NO GUIDERAIL, 28' OUT TO OUT, 40' LONG PIPE.	
ANDREWS RD	NELSON RD	WATER ST	1.3	CHARLOTTE	CULVERT 1: 12" CMP W/ 1' COVER, SETTLEMENT @ INTERSECTION, OUT TO OUT 36' @ INTERSECTION NELSON RD. CULVERT 2: 12" CMP W/ 2' COVER, APPROXIMATELY 800' FORM INTERSECTION. PAVEMENT OK, 30' OUT TO OUT. CULVERT 3: 18" HDPE W/ 2' COVER, 40' OUT TO OUT, PAVEMENT IS GOOD (NEW REPLACE) @ INTERSECTION OF SEASON USE ROAD.	1
GRISWOLD RD	CR 72 BARD RD	NORTH HILL RD	1.4	ARKWRIGHT	BRIDGE (3323400): BRIDGE 24' RAIL TO RAIL, NON-CONFORMING BRIDGE RAILING, PAVEMENT CRACKS W/ MINOR APPROACH SETTLEMENT.	
NORTH HILL RD	GRISWOLD RD	CR 77 ROOD RD	2.9	CHARLOTTE	CULVERT 1: 12" HDPE, 1.5' COVER, ROADWAY SETTLEMENT, 50' OUT TO OUT, 20° SKEW, 1000' SOUTH OF GRISWOLD RD. CULVERT 2: 42" STEEL PIPE, 1' COVER, 40' OUT TO OUT, SHOULDER ERODED AWAY ON UPSTREAM SIDE, 1.4 MI FROM START OF NORTH HILL @ GRISWOLD RD. CULVERT 3: 24" STEEL PIPE, LESS THAN 1' COVER, 50' OUT TO OUT, SETTLEMENT OVER PIPE 1.5 MI FROM START OF NORTH HILL. CULVERT 4: 18" HDPE, 1' COVER, 40' OUT TO OUT, SETTLEMENT OVER PIPE, 1.7 MI FROM START OF NORTH HILL. CULVERT 5: 24" HDPE, 2' COVER, 30' OUT TO OUT, SETTLEMENT OVER PIPE, 2 MI FROM START OF NORTH HILL.	3 (BETWEEN T7,T11,T3 & T20,T19,T21,T36 LOC.)
CR 66 SINCLAIR DR	MILL ST/MAIN ST	SYLVESTER RD	0.4	GERRY/CHARLOTTE	3326140: 32' CURB TO CURB, NON-CONFORMING BRIDGE RAIL. CULVERT: 8' x 3', <1' COVER, 47' OUT TO OUT, 1000' S OF MAIN ST.	
CR 66 SINCLAIR DR	SYLVESTER RD	NY 60 AT ACCESS ROAD	0.2	GERRY	1027840: ROUTE 66 CROSSING UNDER ROUTE 60.	
SYLVESTER RD	NY 60	CR 66 SINCLAIR DR	0.3	GERRY		
CR 77 ROOD RD	CR 72 BARD RD	RUTTENBUR RD	1	ARKWRIGHT	BIN 3323450: MINOR TRANSVERSE CRACKS ON BRIDGE APPROACH. CULVERT 4' W x 3' H BOX, <1' COVER, 35' OUT TO OUT, 3000' SOUTH OF CR 72. CULVERT 12" RCP, 1' COVER, 35' OUT TO OUT, 4000' SOUTH OF CR 72.	4
CR 77 ROOD RD	RUTTENBUR RD	MILL CR RD	2.3	CHARLOTTE	CULVERT 1: 4' x 6' BOX, 2' COVER, 40' OUT TO OUT, 2000' SOUTH OF RUTTENBUR. CULVERT 2: 24" RCP, 1'-2' COVER, 40' OUT TO OUT, JUST SOUT OF CASSADAGA RD. CULVERT 3: 4' x 4' BOX, 1' COVER, 40' OUT TO OUT, 2800' SOUTH OF RUTTENBUR. CULVERT 4: 3' x 6' HIGH BOX, 1' COVER, 40' OUT TO OUT, 1 MILE SOUTH OF RUTTENBUR. CULVERT 5: 18" RCP, 2'-10' COVER, 50' OUT TO OUT, 10,000 OUT TO OUT, 10000' SOUTH OF RUTTENBUR. CULVERT 6: 13' x 5' BOX, 1'-3' COVER 60' OUT TO OUT, @ MILL CREEK ROD (NEEDS GUIDERAIL).	4
CR 77 ROOD RD	MILL CR RD	HOOKER RD	1.3	CHARLOTTE	CULVERT 1: 18" RCP, 1'-2' COVER, 40' OUT TO OUT, 1000' S OF MILL CREEK ROAD CULVERT 2: 15' x 4' BOX, 3' COVER, 43' OUT TO OUT - NO RAILING, 2000' SOUTH OF MILL CREEK RD. 3323810: 32' RAIL TO RAIL, TRANSVERSE CRACKS @ BRIDGE JOINTS, (2) LONGITUDINAL CRACKS IN WEARING SURFACE. CULVERT 3: 12" RCP, 1' COVER, 37' OUT TO OUT, 4000' SOUTH OF MILL CREEK RD. 3323800: NON-CONFORMING BRIDGE RAIL, 32' RAIL TO RAIL, TRANSVERSE CRACKING @ APPROACH.	
CR 66/67 MAIN ST	SINCLAIR DR	CR 64 EAST AVE	0.2	CHARLOTTE		
CR 77 JAMESTOWN RD	MAIN ST	NY 60	0.8	GERRY/CHARLOTTE	CULVERT: 3000' N OR NY60, CORRUGATED STEEL PIPE, 13' WIDE, 2' COVER, TRANSVERSE CRACKING ABOVE CULVERT.	

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APPENDIX J

CASSADAGA WIND PROJECT

CULVERT LOCATION TABLE (CONTINUED)

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	CULVERT INFORMATION (INCLUDES BRIDGE LOCATIONS)	POTENTIAL ACCESS ROUTE NUMBERS
CR 77 PARK ST/CHARLOTTE CTR. RD	HOOKER RD	MAIN ST	3.3	CHARLOTTE	3323830: APPROACH SETTLEMENT, TRANSVERSE CRACKS @ HIGHER JOINTS, 29' RAIL TO RAIL. CULVERT 1: 4' RCP, 2' COVER, 40' OUT TO OUT, 1000' SOUTH OF HOOKER RD. CULVERT 2: 3' RCP, 5' COVER, 40' OUT TO OUT, 4500' SOUTH OF HOOKER RD. 3323820: TRANSVERSE CRACKS @ BRIDGE JOINTS, 29' RAIL TO RAIL, 7000' SOUTH OF HOOKER RD. 3323790: NON-STANDARD BRIDGE RAIL & TRANSITIONS, CRACKS @ JOINTS, 30' RAIL TO RAIL, 8000' SOUTH OF HOOKER RD. CULVERT 3: 2' x 2' BOX, 1' COVER, 43' OUT TO OUT, 9000' SOUTH OF HOOKER RD.	
CR 66 KENT ST	CR 77 PARK ST	BATES RD	6.7	CHARLOTTE	PAVEMENT CONDITION: MANY SPOT REPAIRS (7) TRANSVERSE CRACKS @ CULVERTS. CULVERT 1: 36" CMP, 10'+ COVER, 550' EAST OF PARK ST. CULVERT 2: 36" CMP,8' COVER, 6000' EAST OF PARK ST. CULVERT 3: 18" STEEL, 4' COVER, 32' OUT TO OUT, 8000' EAST OF PARK ST. CULVERT 4: 18" IRON, 6' COVER, 32' OUT TO OUT, 9000' EAST OF PARK ST. CULVERT 5: 12' x 5' DEEP BOX, , 1' COVER , 40' RAIL TO RAIL, 1.9 MI EAST OF PARK ST. CULVERT 6: 4' x 4' BOX, 3' COVER, 34' OUT TO OUT, MINOR EROSION TO SHOULDER TO SHOULDER, 2.2 MI EAST OF PARK ST. CULVERT 7: 12" CMP, 5' COVER, 34' OUT TO OUT, 2.3 MILES EAST OF PARK ST. CULVERT 8: 2' x 3' BOX, HEADWALL SEVERELY CRACKED & SPALLED WITH SHOULDER EROSION, 2' COVER, 44' OUT TO OUT, NO RAIL. CULVERT 9: 4' x 10' BOX, <1' COVER, 30' RAIL TO RAIL - NON CONFORMING, 4.5 MI FROM PARK ST.	
BATES RD CR 64	CR 66/77 PARK ST	CR 66 THORNTON RD	5.9	CHARLOTTE	CULVERT 1: 2' x 2' BOX, <1' COVER, 36' OUT TO OUT. CULVERT 2: 1' x 3', 2' COVER. 3324530: APPROACH PAVEMENT SETTLING, 29' RAIL TO RAIL, PAVEMENT PATCH, 3000' W OF THORNTON. CULVERT 3: 24" CMP, PAVEMENT SETTLEMENT OVER CULVERT, 1'-6' COVER. CULVERT 4: 4' x 5' BOX, 1' COVER, 37' RAIL TO RAIL, 6500' WEST OF THORNTON. CULVERT 5: 3' x 4' BOX, < 1' COVER, 36' OUT TO OUT, 7000' WEST OF THORNTON.	
COOK RD	CR 77 ROOD RD	LEWIS RD	0.7	CHARLOTTE	CULVERT 1: 42" STEEL, W/ 1'-2' COVER, 40' OUT TO OUT, .2 MI FROM LEWIS RD. CULVERT 2: 78" RIVET STEEL PIPE, W/ 1'-2' COVER, 40' OUT TO OUT .7 MI FROM LEWIS RD.	4
RUTTENBUR RD	CR 77 ROOD RD	CR 85 FARNGTN. RD	1.6	ARKWRIGHT	CULVERT 1: 72" CMP, 1' COVER, 40' OUT TO OUT, .4 MI FORM CR 85. CULVERT 2: 72" CMP, 1' COVER, 40' OUT TO OUT, .42 MI FROM CR 85. CULVERT 3: 72" CMP, 1' COVER, 40' OUT TO OUT, .5 MI FROM CR 85. CULVERT 4: 12", 1' COVER, 40' OUT TO OUT, .6 MI FROM CR 85. CULVERT 5: 6'x4' SQUASH PIPE W/ LESS , 40' OUT TO OUT, 65 MI FROM CR 85. CULVERT 6: 3' CMP, 1' COVER, 40' OUT TO OUT, .7 MI FROM CR 85. CULVERT 7: 10' CMP, 1'-2' COVER, 80' OUT TO OUT, 1.4 MI FROM CR 85.	
LEWIS RD	RUTTENBUR RD	MILL CR RD	2.1	CHARLOTTE	CULVERT 1: 30" STEEL, 1'-2' COVER, 40' OUT TO OUT, @INTERSECTION RUTTENBUR RD. CULVERT 2: 36" HDPE, 1'-2' COVER, 60' OUT TO OUT, @ INTERSECTION COOK RD. CULVERT 3: 18" CMP, LESS THAN 1' COVER, 30' OUT TO OUT @ HOUSINGTON RD.	4
MILL CR RD	CR 77 ROOD RD	EAST RD	2.8	CHARLOTTE	CULVERT 1: 36" HDPE W/ LESS THAN 1' COVER, 30' OUT TO OUT, .3 MI FROM CR 77 CULVERT 2: 18" UNKNOWN TYPE, FROST HEAVING UP THROUGH PAVEMENT, 30' OUT TO OUT .7 MI FROM CR 77. BRIDGE (3323890): 21' RAIL TO RAIL, CURVE CLOSE TO EAST SIDE OF APPROACH. CULVERT 3: 21" CMP PLATE ARCH, 1' COVER @ MID-SPAN, OUT TO OUT 26', 1.1 MI FROM CR 77. CULVERT 4: 24" CMP 1' COVER, 30' OUT TO OUT, 1.5 MI FROM CR 77. CULVERT 5: 74" CMP & 48" HDPE, 3' COVER, 40' OUT TO OUT, 1.6 MI FROM CR 77. CULVERT 6: 24" CMP, LESS THAN 1' COVER, 30' OUT TO OUT, 1.9 MI FROM CR 77.	4 (BETWEEN LEWIS RD AND T58/T54 LOC.)
EAST RD	CR 77 CHARLOTTE CTR. RD	BOUTWELL HILL RD	3.2	CHARLOTTE	CULVERT 1: 18" HDPE (NEW) 3' COVER BUT PAVEMENT IS SETTLING APPROX. 1 MI. FROM BOUTWELL RD. CULVERT 2: 36" STEEL PIPE, 1'-2' COVER, 32' OUT TO OUT, 1.9 MI FROM BOUTWELL RD.	7 (BETW. T52/T50 AND T41 LOC.)
SWANSON RD	BOUTWELL HILL RD	CR 66 THORNTON RD	1.1	CHARLOTTE		
CLELAND RD	EAST RD	CR 66 THORNTON RD	1.3	CHARLOTTE	CULVERT 1: 36", 2' COVER, 30' OUT TO OUT, .5 MI PAST OR SOUTH OF EAST RD. NOTE: CULVERT IS CMP ON EAST END STEEL PIPE ON WEST CR UPSTREAM SIDE. CULVERT 2: 24" STEEL, 1-2' COVER, 30' OUT TO OUT, 1.3 MI FROM EAST RD. CULVERT 3: 24" STEEL PIPE, 6" COVER, 30' OUT TO OUT, HEAVILY CORRODED & COLLAPSING @ THORNTON RD. INTERSECTION.	7 (BETW. SUB-STATION AND BOUTWELL HILL RD), 8
C JOHNSON RD	BOUTWELL HILL RD	EAST RD	2.1	CHARLOTTE	CULVERT 1: 24" CMP, 1-2' COVER, 30' OUT TO OUT, @ INTERSECTION W/ THORNTON RD.	
HARPER RD	CR 77 CHARLOTTE CTR. RD	BOUTWELL HILL RD	1.1	CHARLOTTE	CULVERT 1: 48" HDPE, 3' COVER, 50' OUT TO OUT, PATCHING OVER PIPE (NEW) APPROX. .3 MI SOUTH OF RT 77 INTERSECTION. CULVERT 2: 72" RIVETED STEEL PIPE, 1'-2' COVER, 40' OUT TO OUT, .6 MI PAST CR 77.	
GILBERT RD	CR 66 THORNTON RD	JOHNSON RD	0.7	CHARLOTTE	CULVERT 1: 18" STEEL PIPE, LESS THAN 1' COVER, 30' OUT TO OUT, .2 MI FROM (NORTH) JOHNSON RD. CULVERT 2: 72" STEEL PLATE ARCH, 3' COVER, 50' OUT TO OUT.	
BOUTWELL HILL RD	CR 66 THORNTON RD	CR 85 ERWIN RD	5.8	CHARLOTTE/CHERRY CREEK	CULVERT 1: 24" HDPE, 1' COVER, 30' OUT TO OUT, APPROXIMATELY .4 MI FROM CLELAND RD. INTERSECTION. CULVERT 2: 42" HDPE, 18" COVER, 40' OUT TO OUT, APPROXIMATELY .3 MI FROM SANFORD RD. INTERSECTION. CULVERT 3: 18" HDPE, 6" COVER, 30' OUT TO OUT, APPROXIMATELY 1.2 MI FROM SANFORD RD. INTERSECTION. CULVERT 4: 30" HDPE, LESS THAN 6" COVER, 40' OUT TO OUT, @ INTERSECTION OF ERWIN RD, CR 85.	6 THRU 8

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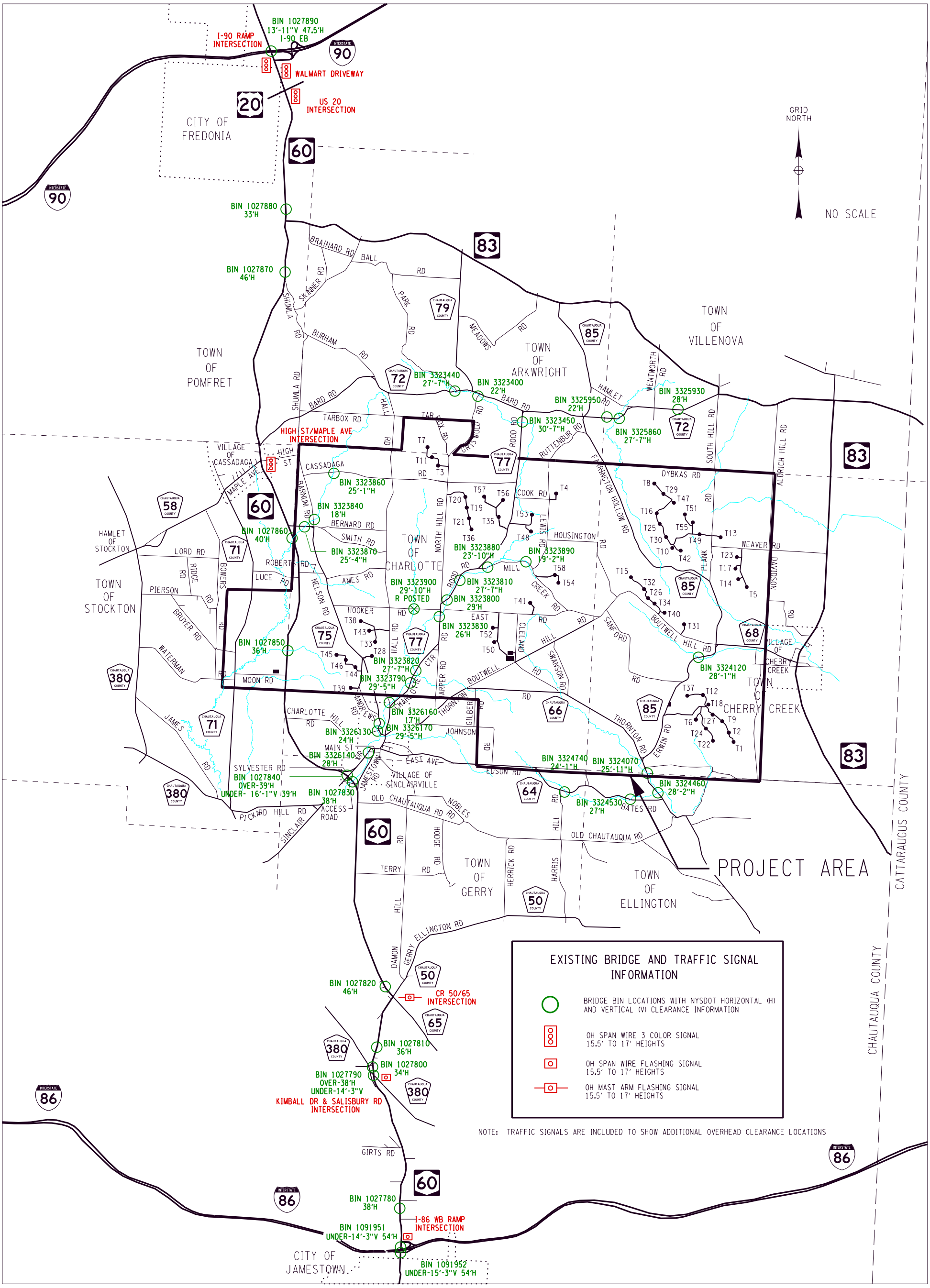
APPENDIX J

CASSADAGA WIND PROJECT

CULVERT LOCATION TABLE (CONTINUED)

ROUTE/ROAD NAME	FROM	TO	LENGTH (MI)	TOWN(S)	CULVERT INFORMATION (INCLUDES BRIDGE LOCATIONS)	POTENTIAL ACCESS ROUTE NUMBERS
HOUSINGTON RD	LEWIS RD	EAST RD	2.2	CHARLOTTE/CHERRY CREEK	CULVERT 1: 12" HDPE, 1.5' COVER, ROADWAY SETTLEMENT, 50' OUT TO OUT, 20° SKEW, 1000' SOUTH OF GRISWOLD. CULVERT 2: 18" HDPE, 2' COVER, 30' OUT TO OUT, 13' SETTLEMENT (O.C.) APPROXIMATELY 500' SOUTH OF CASSADAGA RD. CULVERT 3: 42" STEEL PIPE, 1' COVER, 40' OUT TO OUT, SHOULDER ERODED AWAY ON UPSTREAM SIDE, 1.4 MI FROM START OF NORTH HILL @ GRISWOLD RD. CULVERT 4: 24" STEEL PIPE LESS THAN 1' COVER, 50' OUT TO OUT, SETTLEMENT OVER PIPE 1.5 MI FROM START OF NORTH HILL. CULVERT 5: 18" HDPE, 1' COVER, 40' OUT TO OUT, SETTLEMENT OVER PIPE, 1.7 MI FOR START OF NORTH HILL. CULVERT 6: 24" HDPE, 2' COVER, 30' OUT TO OUT, SETTLEMENT OVER PIPE, 2 MI. FROM START OF NORTH HILL.	
SANFORD RD	BOUTWELL HILL RD	CR 85 ERWIN RD	2.5	CHERRY CREEK		
CR 85 ERWIN RD/FARRINGTON HOLLOW RD	THORNTON RD	PLANK RD	4.5	CHERRY CREEK	CULVERT 1: 3'x18", 1.0' COVER, 40' OUT TO OUT, .7 MI FROM PLANK ROAD INTERSECTION. CULVERT 2: 11'x8' BOX, 2' COVER, 40' OUT TO OUT, .8 MI FROM PLANK ROAD INTERSECTION. CULVERT 3: 3'x3' BOX, 18" COVER , 35' OUT TO OUT, 1.6 MI FROM PLANK ROAD INTERSECTION. CULVERT 4: 9'x5' BOX, 18" COVER, 30' OUT TO OUT, 2.3 MI FROM PLANK ROAD INTERSECTION. CULVERT 5: SOLDIER PILE & LAGGING WALL, PILES @ 58", TIEBACKS: 3/4" CABLES, HEIGHT 10', 8' FROM EDGE OF PAVEMENT & 15' FROM EDGE OF PAVEMENT, WALL IS 2'x4' STACKED AND 40' LONG. CULVERT 6: 2.5 MI FROM PLANK RD. - SETTLING OVER BRIDGE W/ NEWER ASPHALT PATCHES. CULVERT 7: 5x5' BOX, 0' COVER, 40' OUT TO OUT, LOOKS LIKE IT IS LEANING, CRACKS WHERE LEGS ATTACH TO SLAB, 2.6 MI FROM PLANK ROAD INTERSECTION. CULVERT 8: 5'x4' BOX, 0' COVER, 35' OUT TO OUT, CONCRETE IN BAD SHAPE, 2.7 MI FROM PLANK RD. CULVERT 9: 4'x2' BOX, 2-3' COVER, 35' OUT TO OUT, 3.1 MI FROM PLANK RD. CULVERT 10: 5'x3' BOX, 0' COVER, 35' OUT TO OUT, 3.7 MI FROM PLANK RD. (GOOD CONDITION) CULVERT 11: 5'x5' BOX, 0' COVER, 35' OUT TO OUT, 3.8 MI FROM PLANK RD. (GOOD CONDITION). CULVERT 12: 5'x5' BOX, 0' COVER, 40' OUT TO OUT, 4 MI FROM PLANK RD. (HEADWALL HEAVILY SPALLED).	6 THRU 8 (BETWEEN PLANK RD AND BOUTWELL HILL RD), 8 (BETWEEN CR 66 AND T37/T12/T18/T27/T9/T2/T1/T6/T24/T22 LOC.)
CR 85 FARNGTN.	PLANK RD	CR72	4.4	CHERRY CREEK		
PLANK RD	DYBKAS RD/TOWN LINE	CR 85 FARNGTN. RD	2.9	CHERRY CREEK	CULVERT 1: 24" STEEL PIPE, 1'-2' COVER, 30' OUT TO OUT, ADJ. #HSE#7824 CULVERT 2: 48" CMP, 1-2' COVER, 1-2' COVER, 30' OUT TO OUT, @ INTERSECTION OF PLANK & CR85.	5 THRU 8
WEAVER RD	PLANK RD	NY 83	2.2	CHERRY CREEK	CULVERT 1: 24" HDPE, 1'-3' COVER, 100' OUT TO OUT, @ INTERSECTION OF OF PLANK & WEAVER. CULVERT 2: 18" CMP, 1'-2' COVER, 30' OUT TO OUT, 1000' FROM INTERSECTION W/ PLANK, SETTLEMENT OVER CULVERT. CULVERT 3: 36" HDPE, 3'-4' COVER, 30' OUT TO OUT, 100' FROM INTERSECTION W/ DAVIDSON, ROADWAY SETTLEMENT APPEARS TO BE FROM RECENT CONSTRUCTION. CULVERT: 5' CMP, 5' COVER, 40' OUT TO OUT, APPROX. 1/2 MI FROM INTERSECTION WITH PLANK ROAD.	5
ROBERTS RD	NY 60	CR 75 NELSON RD	0.5	CHARLOTTE	CULVERT 1: 6' DIAMETER CMP, 300 FT WEST OF CR 75 GOOD CONDITION DOWNSTREAM BANKS APPEARED SCOURED, NO GUIDE RAIL, LESS THAN 1' COVER OVER PIPE.	1
SOUTH HILL RD	CR 72 CASSADAGA RD	PLANK RD	1.5	VILLENOVA	CULVERT 1: 18" STEEL PIPE, 1'-2' COVER, 30' OUT TO OUT, APPROXIMATELY 800' PAST INTERSECTION OF CR 72. CULVERT 2: 24" RCP, 2'-3' COVER, 40' OUT TO OUT, APPROXIMATELY 1500' PAST INTERSECTION OF CR 72.	5 THRU 8
CR 72 CASSADAGA RD	CR 85 FARNGTN. RD	SOUTH HILL RD	2.7	VILLENOVA	NOTABLE ITEMS: SOILDER PILE & LAGGING WALL, PILES, RR RAILS SPACED @ 80" O.C. W/ WHALERS SPACED @ 160", TIMBERS (2" x 4" ON SIDES), EMBEDMENT UNK., WALL CONDITION: FAIR/SOME TRUCK FARM TRAFFIC OVER ROAD. BRIDGE (3325950 NON-CONFORMING TRANS, RAIL): 25' RAIL TO RAIL, 2 SPAN RC SLAB APPROX 500' PAST T.L. CULVERT 1: 9' x 5' CONC. BOX =, 1' COVER, 40' OUT TO OUT, APPROX. 500' BEFORE AKWRIGHT T.L./VILL. T.L. CULVERT 2: 18" x 5' CONC. BOX, 1' COVER 40' OUT TO OUT, APPROXIMATELY 1500' BEFORE HAMLET RD. BRIDGE (3325860): 29' RAIL TO RAIL, WEARING SURFACE PATCHWORK, APPROXIMATELY 800' BEFORE HAMLET RD. CULVERT 3: 18" STEEL PIPE, 1-4' COVER, 40' OUT TO OUT @INTER. OF HAMLET RD. CULVERT 4: 12' x 6' CONC. BOX, 1' (+/-) COVER, 32' RAIL TO RAIL, APPROX. 1000' PAST WENTWORTH RD. BRIDGE (3325930): 28' RAIL TO RAIL, NON-CONFORMING BRIDGE RAILING, APPROXIMATELY 1/2 WAY, WENTWORTH & SOUTH HILL RD. CULVERT 5: 2' x 3' BOX, 2' COVER, 40' OUT TO OUT, APPROXIMATELY 1/2 WAY BETWEEN WENTWORTH & SOUTH HILL RD.	5 THRU 8



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APPENDIX J

EXISTING BRIDGE AND TRAFFIC SIGNAL LOCATIONS

CASSADAGA WIND PROJECT

CHAUTAUQUA COUNTY

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

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APPENDIX K

List of Airport Locations

Map of Airport Locations

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667 www.cscos.com

APPENDIX K

LIST OF AIRPORTS

Chautauqua County Public and Private Airports, New York:

10 miles from northern project limit	
Chautauqua County-Dunkirk Airport - DKK Dunkirk, New York Facility Usage: Public	Chaut Co 3163 Airport Dr Jamestown, NY 14701 (716) 661-8400
7.5 miles from southern project limit	
Chautauqua County-Jamestown Airport - JHW Jamestown, New York Facility Usage: Public	Chautauqua County County Office Bldgs Mayville, NY 14757 (716) 753-4000
In project area	
Spaudling Aerodrome Airport - 28NY Cassadaga, New York Facility Usage: Private	Universal Resources Holding Inc 3152 East Main Road Dunkirk, NY 14048 (716) 673-9116
9 miles from western project limit	
Chautauqua Lake Airpark Airport - 65NY Mayville, New York Facility Usage: Private	Harold V Carlson 470 - 12 Bent Creek Oval Aurora, OH 44202
11 miles from western project limit	
Dart Airport - D79 Mayville, New York Facility Usage: Public	Robert G. Dart P.O. Box 211 Mayville, NY 14757 (716) 753-2160
12 miles from southern project limit	
Wca Hospital Heliport - 4NK0 Jamestown, New York Facility Usage: Private	Wca Hospital 207 Foote Ave Jamestown, NY 14701 (716) 487-0141
11 miles from northern project limit	
Lakeview Shock Incarceration Center Heliport - NY99 Brocton, New York Facility Usage: Private	Nys Dept Of Correctional Svcs P.O. Box T Brocton, NY 14716 (716) 792-7100
9.5 miles from northern project limit	
Alstar North Heliport - 22NK Dunkirk, New York Facility Usage: Private	Wca Services Corp 738 Monroe St Dunkirk, NY 14048 (716) 664-6606
11 miles from northern project limit	
H H Aviation Service Inc. Heliport - NK65 Forestville, New York Facility Usage: Private	Robert L. Hartloff 10937 Allegheny Road Forestville, NY 14062 (716) 934-3396

C&S Engineers, Inc.
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Syracuse, New York 13212
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Fax: 315-455-9667 www.cscos.com

LIST OF AIRPORTS (Continued)

Chautauqua County Public and Private Airports, New York:

16.5 miles from southern project limit	
Laska Airport - 3NK4 Jamestown, New York Facility Usage: Private	Michael Laska 692 Kiantone Rd Jamestown, NY 14701 (716) 569-2299
14 miles from southern project limit	
Ridgeview Airport - 55NY Jamestown, New York Facility Usage: Private	Stanley H. Johnson 1932 Shadyside Rd Lakewood, NY 14750 (716) 763-8475
16 miles from southern project limit	
Fairbank Farms Airport - NY89 Jamestown, New York Facility Usage: Private	Jeffrey Carlson Rd 2 Box 572 Stoneledge Rd Ashville, NY 14710 (716) 782-2000
13 miles from southern project limit	
Kennedy Airfield Airport - 9NY4 Kennedy, New York Facility Usage: Private	Jeff And Sandra Paden 2408 Fisher Hill Road Kennedy, NY 14747 (716) 267-2359

Cattaraugus County Public and Private Airports, New York:

11.5 miles from eastern project limit	
Neverland Airport - NY76 Cattaraugus, New York Facility Usage: Private	Henry Fisher 10374 Ritter Road Cattaraugus, NY 14719 (716) 257-9526
7 miles from eastern project limit	
South Dayton Airport - NY27 South Dayton, New York Facility Usage: Private	Van Bron Corp. Rt 62 - Box 285 Southdayton, NY 14138 (716) 988-3252
12 miles from southern project limit	
Randolph Airport - D85 Randolph, New York Facility Usage: Public	Robert Anita Campbell 4729 Whiteside Pk Wy Maplesprings, NY 14756 (716) 386-6538
17 miles from eastern project limit	
Ultralight Port Ultralight - 67NY Little Valley, New York Facility Usage: Private	Larry Tocha Rd 1, Box 12 Sodum Rd Littlevalley, NY 14755 (716) 938-6315

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LIST OF AIRPORTS (Continued)

Cattaraugus County Public and Private Airports, New York:

16 miles from eastern project limit

Berdick Field Airport - 0NK0 Cattaraugus, New York Facility Usage: Private	R. F. Mc Elhaney P.O. Box 184 Littlevalley, NY 14755 (716) 257-9201

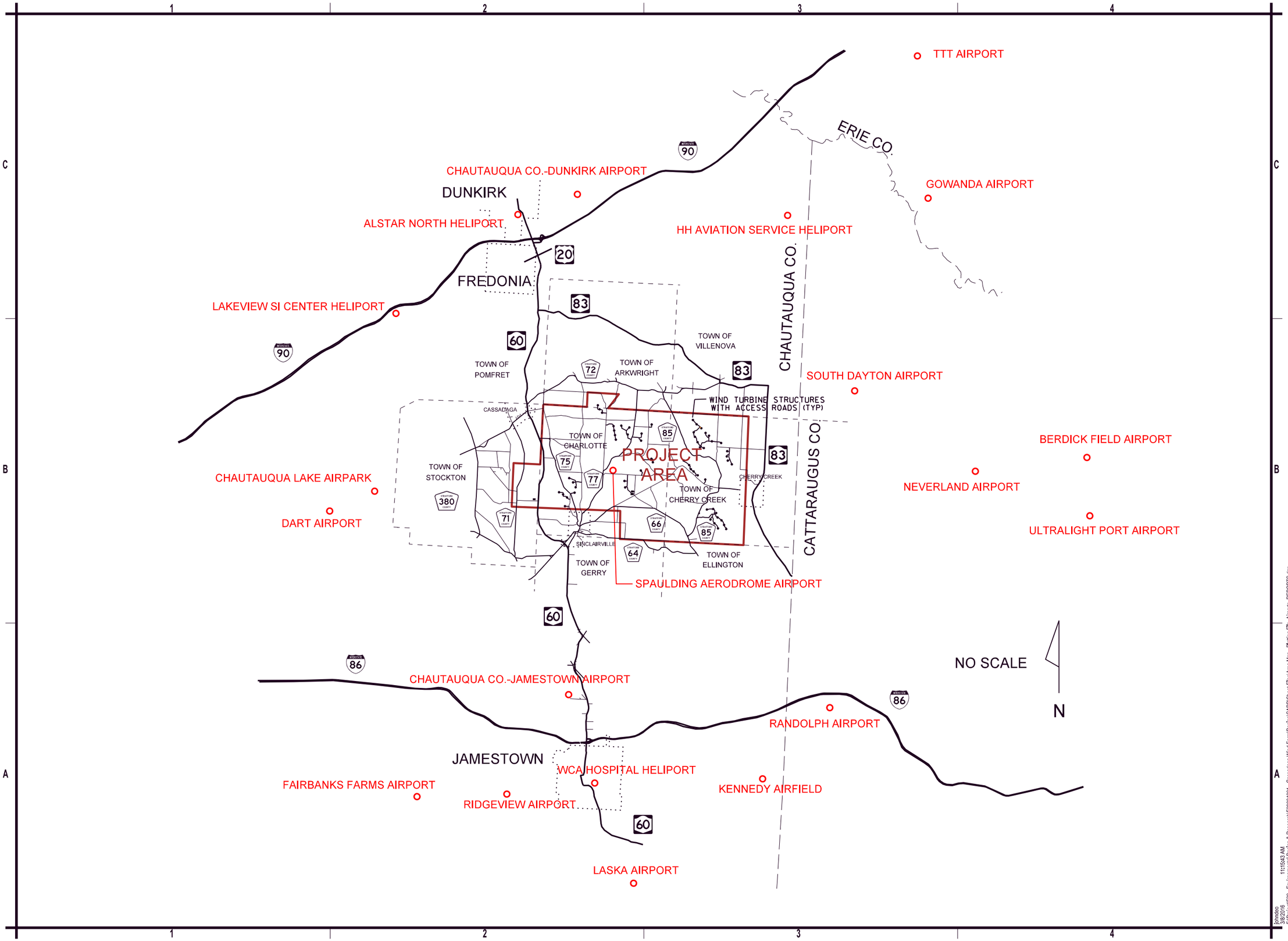
Erie County Public and Private Airports, New York:

15 miles from northern project limit

Gowanda Airport - D59 Gowanda, New York Facility Usage: Public	Dan Gernatt Gravel Prod.Inc. P.O. Box 400 Collins, NY 14034 (716) 532-3371

19.5 miles from northern project limit

Ttt Air Airport - 6NK4 North Collins, New York Facility Usage: Private	Ttt Inc Rfd Pontiac Rd Angola, NY 14006 (716) 337-0612



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CASSADAGA WIND PROJECT
CHAUTAUQUA COUNTY

AIRPORT LOCATIONS NEAR PROJECT AREA

APPENDIX K

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APPENDIX L

Roadway Rating Photos

BARD RD (CR 72) FROM NY 60 TO SHUMLA RD

INTERSECTION OF BARD RD AND NY 60
LOOKING SOUTH

INTERSECTION OF BARD RD AND NY 60 (CONT'D.)
LOOKING SOUTHWEST

POSTED ROAD

LOOKING SOUTHWEST

CULVERT

INTERSECTION OF BARD RD AND SHUMLA RD
LOOKING NORTHEAST

BARD RD (CR 72) FROM SHUMLA RD TO HALL RD

CULVERT

INTERSECTION OF BARD RD AND HALL RD
LOOKING EAST

BARD RD (CR 72) FROM HALL RD TO CR 79 CENTER RD

INTERSECTION OF BARD RD AND HALL RD
LOOKING WEST

CULVERT

CULVERT

LOOKING WEST

BARD RD (CR 72) FROM HALL RD TO CR 79 CENTER RD (CONTINUED)

POSTED ROAD

INTERSECTION OF BARD RD AND CR 79
LOOKING EAST

BARD RD (CR 72) FROM CR 79 CENTER RD TO CR 85

POSTED ROAD

CULVERT

LOOKING WEST

CULVERT AT INTERSECTION OF BARD RD AND CR 85
LOOKING NORTH

BARD RD (CR 72) FROM CR 79 CENTER RD TO CR 85 (CONTINUED)

INTERSECTION OF BARD RD AND CR 85
NORTHEAST CORNER LOOKING EAST

CR 72 FROM CR 85 TO SOUTH HILL RD

POSTED ROAD

CULVERT

LOOKING SOUTHWEST

INTERSECTION OF CR 72 AND SOUTH HILL RD
LOOKING NORTHEAST

ROBERTS RD

SEASONAL ROAD, NOT PLOWED IN WINTER

CULVERT

CR 75 FROM ROBERTS RD TO ANDREWS RD

INTERSECTION OF CR 75 AND ROBERTS RD

POSTED ROAD

INTERSECTION OF CR 75 AND HOOKER RD
LOOKING SOUTH

CULVERT

ANDREWS RD

NORTHERN INTERSECTION OF ANDREWS RD AND CR 75
LOOKING NORTH

SEASONAL ROAD, LOOKING NORTH

HALL RD FROM BARD RD (CR 72) TO CASSADAGA RD

INTERSECTION OF HALL RD AND BARD RD (CR 72)
LOOKING EAST

LOOKING SOUTH

INTERSECTION OF HALL RD AND TARBOX RD
LOOKING SOUTH

CULVERT

HALL RD FROM BARD RD (CR 72) TO CASSADAGA RD (CONTINUED)

LOOKING SOUTH

INTERSECTION OF HALL RD AND CASSADAGA RD
LOOKING SOUTH

HALL RD FROM CASSADAGA RD TO HOOKER RD

INTERSECTION OF HALL RD AND BERNARD RD
LOOKING SOUTH

INTERSECTION OF HALL RD AND SMITH RD
LOOKING SOUTH

INTERSECTION OF HALL RD AND AMES RD
LOOKING SOUTH

INTERSECTION OF HALL RD AND HOOKER RD
LOOKING SOUTH

CASSADAGA RD FROM HALL RD TO NORTH HILL RD

INTERSECTION OF CASSADAGA RD AND HALL RD
LOOKING EAST

LOOKING EAST

INTERSECTION OF CASSADAGA RD AND NORTH HILL RD
LOOKING NORTHEAST

INTERSECTION OF CASSADAGA RD AND NORTH HILL RD
LOOKING EAST

NORTH HILL RD

INTERSECTION OF NORTH HILL RD AND TARBOX RD
LOOKING NORTH

LOOKING SOUTH

ROOD RD (CR 77) FROM BARD RD (CR 72) TO COOK RD

INTERSECTION OF ROOD RD (CR 77) AND BARD RD (CR 72)
LOOKING EAST

POSTED ROAD

LOOKING SOUTH

INTERSECTION OF ROOD RD (CR 77) AND COOK RD
LOOKING SOUTHEAST

COOK RD

INTERSECTION OF COOK RD AND ROOD RD (CR 77)
LOOKING NORTH

SEASONAL ROAD, LOOKING WEST

LEWIS RD FROM COOK RD TO MILL CREEK RD

INTERSECTION OF LEWIS RD AND COOK RD
LOOKING SOUTH

CULVERT

SEASONAL ROAD, LOOKING SOUTH

INTERSECTION OF LEWIS ROAD AND MILL CREEK RD
LOOKING SOUTH

MILL CREEK RD FROM LEWIS RD TO EAST RD

CULVERT

LOOKING SOUTHEAST

SOUTH HILL ROAD FROM CR 72 TO DYBKAS RD

POSTED ROAD

LOOKING NORTH

LOOKING SOUTH

INTERSECTION OF SOUTH HILL RD AND DYBKAS RD
LOOKING SOUTH

PLANK ROAD FROM DYBKAS RD TO CR 85

POSTED ROAD

LOOKING NORTH

PLANK ROAD FROM DYBKAS RD TO CR 85 (CONTINUED)

LOOKING SOUTH

DETERIORATED AND WASHED OUT WEST SHOULDER

CULVERT

INTERSECTION OF PLANK ROAD AND CR 85
LOOKING SOUTH

WEAVER HILL ROAD FROM PLANK RD TO DAVIDSON RD

INTERSECTION OF WEAVER HILL RD AND PLANK RD

LOOKING EAST

CR 85 FROM PLANK ROAD TO CR 68

LOOKING NORTH

LOOKING SOUTH

BOUTWELL HILL RD FROM CR 85 TO CLELAND RD

INTERSECTION OF BOUTWELL HILL RD AND CR85
LOOKING NORTH

POSTED ROAD

LOOKING SOUTHEAST

LOOKING NORTHWEST

BOUTWELL HILL RD FROM CR 85 TO CLELAND RD (CONTINUED)

LOOKING NORTHEAST

SEASONAL ROAD IN TOWN OF CHARLOTTE

LOOKING SOUTHWEST

LOOKING NORTHEAST

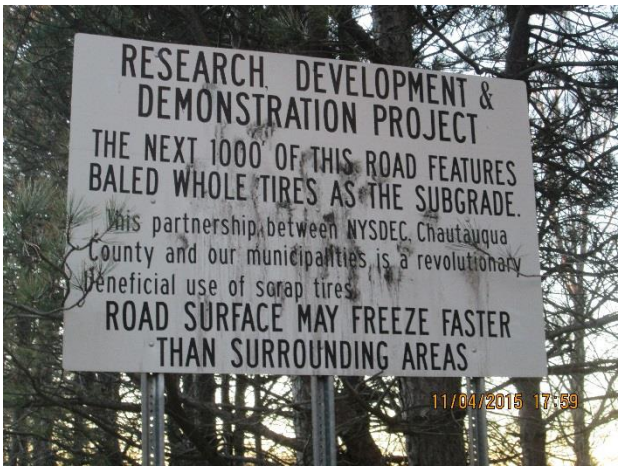
EAST RD FROM BOUTWELL HILL RD TO HARPER RD

INTERSECTION OF EAST RD AND BOUTWELL HILL RD
LOOKING NORTH

LOOKING WEST

EAST RD FROM BOUTWELL HILL RD TO HARPER RD (CONTINUED)

LOOKING WEST



RECYCLED RUBBER SUBBASE

CLELAND RD FROM BOUTWELL HILL RD CR 66

INTERSECTION OF CLELAND RD AND BOUTWELL HILL RD
LOOKING SOUTHEAST

POSTED ROAD

CR 66 FORM CLELAND RD TO BATES RD (CR 64)

INTERSECTION OF CR 66 AND CLELAND RD
LOOKING SOUTHEAST

CULVERT

CR 66 FORM CLELAND RD TO BATES RD (CR 64) (CONTINUED)

LOOKING NORTHWEST

LOOKING SOUTH

LOOKING SOUTHEAST

INTERSECTION OF CR 66 AND BATES RD (CR 64)
LOOKING NORTHWEST

ERWIN RD (CR 85) FROM CR 66 TO SANFORD RD

NORTHERN INTERSECTION OF ERWIN RD (CR 85) AND CR 66
LOOKING NORTHWEST

LOOKING SOUTH

CR 64 FROM CR 66 TO ENGDAHL RD

POSTED ROAD

CULVERT

LOOKING WEST

INTERSECTION OF CR 64 AND ENGDAHL RD
LOOKING NORTHWEST