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## 9 C20395. 'RA

# 191 280 191 VICINITY MAP

Volume III of III Traffic Signal Designs
Part 1 of 2

## NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

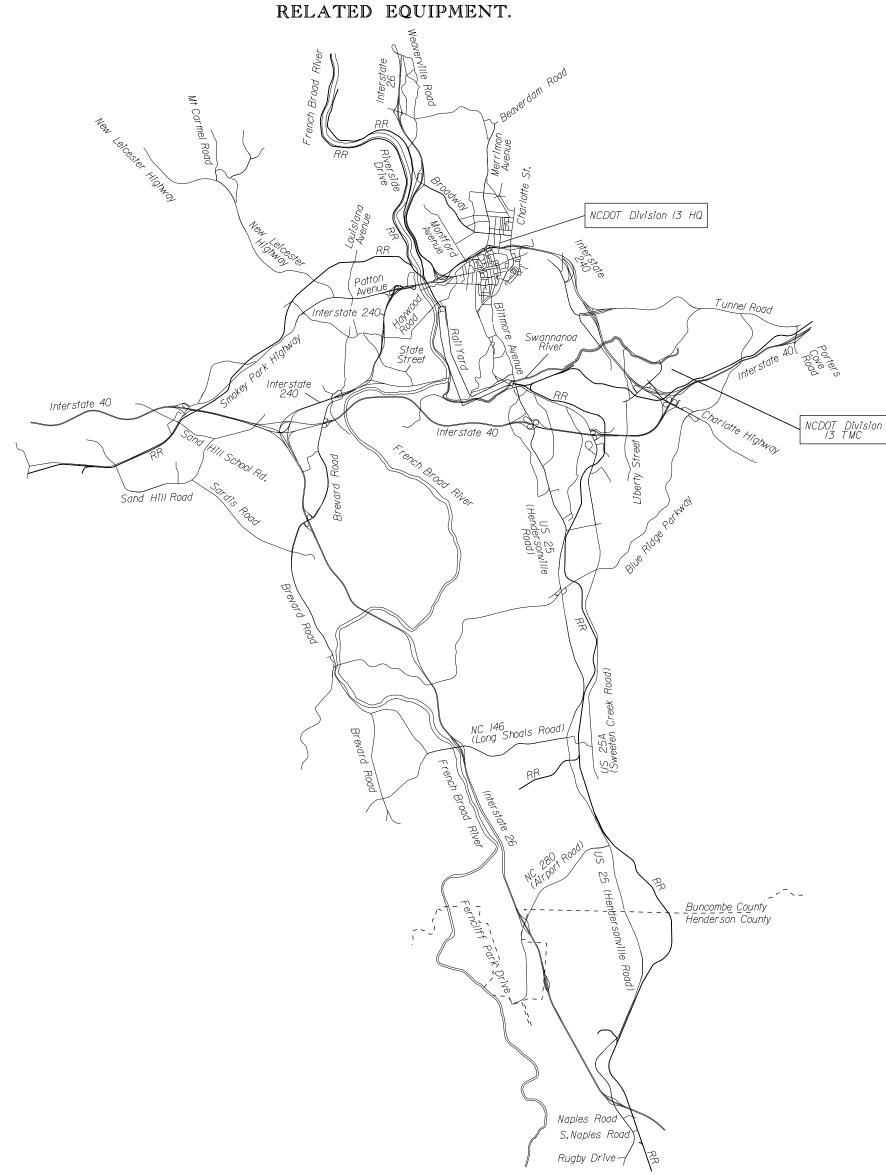
#### PLANS FOR PROPOSED IMPROVEMENTS CITY OF ASHEVILLE

COMPUTERIZED TRAFFIC SIGNAL SYSTEM

REPLACEMENT OF VARIOUS STANDALONE CLOSED-LOOP TRAFFIC SIGNAL SYSTEMS WITH A NEW COMPUTERIZED TRAFFIC SIGNAL SYSTEM.

RELATED WORK INCLUDES:

UPGRADING LOCAL INTERSECTION CONTROLLERS, CABINETS, AND SYSTEM DETECTORS WITH LIMITED SIGNAL WIRING AND SIGNAL HEAD UPGRADES WHEN NECESSARY; UPGRADE AND EXPANSION OF CCTV MONITORING NETWORK; INSTALLING CENTRAL EQUIPMENT AND CENTRAL SOFTWARE; AND INSTALLATION OF AN ETHERNET COMMUNICATIONS NETWORK COMPRISED OF FIBER-OPTIC CABLE AND WIRELESS TECHNOLOGY WITH ALL



STATE PROJECT REFERENCE NO. SIG-1.00A U-4715B 39079.1.2 39079.1.2 STP-1302 (069) CONST

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



2012 STANDARD SPECIFICATIONS

LETTING DATE: APRIL 18, 2017

PROJECT LENGTH = 80 MILES



750 Greenfield Parkway, Garner, NC 27529

**NCDOT CONTACTS:** TRANSPORTATION MOBILITY & SAFETY DIVISION INTELLIGENT TRANSPORTATION SYSTEMS SECTION THOMAS G. PARKER, ITS DEVELOPMENT AND DESIGN ENGINEER CYNTHIA MULDROW - DESIGN ENGINEER

WILLIAM B. HAIRSTON, III - DESIGN ENGINEER

#### **ATKINS**

1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

J. TODD BROOKS, PE - ATKINS PROJECT MANAGER MELISSA B. TOTH, PE - ATKINS SENIOR PROJECT ENGINEER H. ALFRED BADGETT, PE - ATKINS SENIOR PROJECT ENGINEER





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TRAFFIC SIGNAL PLANS

#### ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE ARE HEREBY CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
848.01	CONCRETE SIDEWALK
1101.01	WORK ZONE ADVANCED WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS – LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS – TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS – TURN LANES
1205.07	PAVEMENT MARKINGS – PEDESTRIAN CROSSWALKS
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1700.01	ELECTRICAL SERVICE OPTIONS
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1715.01	UNDERGROUND CONDUIT – TRENCHING
1716.01	JUNCTION BOXES
1720.01	WOOD POLES
1721.01	GUY ASSEMBLIES
1725.01	INDUCTIVE DETECTION LOOPS
1730.01	FIBER-OPTIC CABLE - SPARE CABLE STORAGE
1743.01	PEDESTALS – PEDESTRIAN PUSHBUTTON (TYPE I)
	PEDESTALS – FOUNDATIONS
1751.01	CONTROLLERS AND CABINETS – CABINET COMPONENT LAYOUT
1751.02	CONTROLLERS AND CABINETS – POWER, GROUND AND AUXILIARY
	- 4040 FAOT NILL BROOK BOAR OUTTE 400



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Asheville Signal System Index of Sheets and Roadway Standard Drawings

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 750 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: J T Brooks

SIG 101.0 THRU SIG. 277.1

REVISIONS INIT. DATE

CADD Filename: SIG 1.00B.dgn

N.T.S.

U-4715B	SIG.1.000
PROJECT REFERENCE NO.	SHEET NO.

NCDOT SIGNAL INVENTORY NUMBER	INTERSECTION	SIGNAL SHEET CABLE ROUTING NUMBER SHEET NUMBER	NCDOT SIGNAL INVENTORY NUMBER	INTERSECTION		CABLE ROUTING SHEET NUMBER	NCDOT SIGNAL INVENTORY NUMBER	INTERSECTION	SIGNAL SHEET NUMBER	T CABLE ROUTING SHEET NUMBER
13-0014 N	IC 63 (Leicester Highway) at SR 1369 (Old County Home Road)	1 6.248	13-0279	US 70 (Tunnel Road) at Oteen Church Road	67	6.200	13-0581	US 25A (Sweeten Creek Road) at SR 3162 (Royal Pines Drive)	132	6.262
13-0031 U	IS 70 (Tunnel Road) at I-240 EB Exit Ramp	2 6.191	13-0280	SR 1674 (Elkwood Avenue at SR 1684 (Elk Mountain Road)	68	6.072	13-0584	US 25 (Hendersonville Road) at SR 3505 (Overlook Road)	133	6.030
13-0032 U	IS 70 (Tunnel Road) at I-240 EB Entrance Ramp	3 6.191	13-0282	US 19-23 (Smokey Park Highway) at NC 112 (Sand Hill Road) / Asbury Road	69	6.233	13-0602	US 25 (Hendersonville Road) at West Chapel Road	134	6.041
	S 70 (Tunnel Road) at I-240 WB Entrance Ramp	4 6.191	13-0284	US 25 (Hendersonville Road) at NC 146 (Long Shoals Road)	70	6.109	13-0646	NC 191 (Brevard Road) at I-26 WB Ramps	135	6.123
	IS 70 (Tunnel Road) at I-240 WB Exit Ramp	5 6.191	13-0285	US 25 (Hendersonville Road) at NC 280 (Airport Road) / US25A (Sweeten Creek Road)	71	6.018	13-0647	NC 191 (Brevard Road) at Asheville Outlets	136	6.122
	IC 63 (Leicester Highway) at Old County Home / Evelake Road	6 6.254	13-0286	US 25A (Sweeten Creek Road) at SR 3116 (Mills Gap Road)	72	6.268	13-0660	US 74A (S Tunnel Road) at Overlook Village / Lowes	137	6.185
	IS 19-23 74A (Patton Avenue) at Druid Drive / Laurel Loop	7 6.157	13-0288	NC 81 (Swannanoa River Road) at US 74A (Fairview Road)	73	6.219	13-0663	NC 112 (Sardis Road) at SR 3412 (Sand Hill Road)	138	6.238
	IS 25 (Hendersonville Road) at SR 3495 (Glenn Bridge Road)	8 6.020	13-0291	US 25 (Hendersonville Road) at I-40 EB Exit Ramp	74	6.044		US 25A (Sweeten Creek Road) at I-40 WB Ramps	139	6.212
	IS 25A (Sweeten Creek Road) at SR 3081 (Rock Hill Road)	9 6.207 10 6.169	13-0293 13-0366	US 19-23 74A (Patton Avenue) at Florida Avenue US 70 (Tunnel Road) at SR 2002 (Riceville Road) / Ingles	76	6.160 6.199	13-0669	US 25A (Sweeten Creek Road) at I-40 EB Ramps US 25A (Sweeten Creek Road) at Sweeten Creek Industrial Park Road	140 141	6.212 6.210
	laywood Road/ Ridgelawn Road at Beverly Road IS 25 (Hendersonville Road) at SR 3081 (Rock Hill Road)	11 6.037	13-0380	SR 3214 (Biltmore Avenue) at Short Coxe Avenue	77	6.052	13-0073	US 25A (Sweeten Creek Road) at Gerber Road	141	6.269
	IC 63 (Leicester Highway) at SR 1318 (Eliada Home Road)	12 6.251	13-0381	SR 3214 (Biltmore Avenue) at Hospital Drive	78	6.050	13-0000	US 70 (Tunnel Road) at SR 2000 (Arnold Road /Pleasant Ridge Drive)	143	6.201
	IS 25 (Hendersonville Road) at Linamar	13 6.023	13-0383	SR 3214 (Biltmore Avenue) at Doctors Drive / Unadilla Avenue	79	6.049	13-0710	NC 146 (Long Shoals Road) at Valley Springs Middle School	144	6.106
	IS 25 (Hendersonville Road) at SR 3116 (Mills Gap Road)	14 6.028	13-0384	SR 1332 (N. Louisiana Avenue) at SR 1338 (Emma Road)	80	6.294	13-0713	Amboy Road at State Street	145	6.304
	IS 25 (McDowell Street) at Doctors Drive	15 6.296	13-0389	US 25 (McDowell Street) at US 25A (Lodge Street)	81	6.046	13-0729	NC 146 (Long Shoals Road) at SR 3501 (Clayton Road)	146	6.101
13-0068 U	IS 70 (Tunnel Road) at SR 2032 (New Haw Creek Road)	16 6.193	13-0390	NC 251 (Riverside Drive) at SR 1674 (Old Burnsville Hill Road)	82	6.070	13-0731	NC 191 (Brevard Road) at SR 3431 (Pond Road)	147	6.128
13-0073 N	IC 191 (Brevard Road) at I-240 WB Ramps	17 6.272	13-0394	SR 3214 (Biltmore Avenue) at Choctaw Street / Florence Street	83	6.051	13-0741	US 25 (Hendersonville Road) at Vanderbilt Park Drive	148	6.043
	S 25 (Merrimon Avenue) at Elkmont Drive / Elkwood Avenue	18 6.074	13-0396	SR 3556 (Amboy Road) at SR 3556 (Meadow Road / Lyman Street)	84	6.335	13-0746	NC 280 (Airport Road) at SR 3539 (Fanning Bridge Road)	149	6.080
	S 25 (McDowell Street) at Short McDowell Street / St. Dunstans Road	19 6.295	13-0398	US 74A (S Tunnel Road) at Asheville Mall / Movie Theater	85	6.186	13-0784	US 25 (Hendersonville Road) at SR 3541 (Buck Shoals Road) / Stratford Road	150	6.018
	R 1373 (Old County Home) at SR 1369 (Mount Carmel Road)	20 6.258	13-0400	Hilliard Avenue at SR 3548 (Clingman Avenue)	86	6.173	13-0801	NC 191 (Brevard Road) at I-40 EB Ramps	151	6.129
	IS 70 (Tunnel Road) at SR 2838 (Porters Cove Road)	21 6.205	13-0401	US 70 (College Street) at SR 3284 (Charlotte Street)	87	6.286	13-0802	NC 191 / SR 3413 (Brevard Road) at I-40 WB Ramps	152	6.130
	IS 19-23 74A (Patton Avenue) at US 19-23 Bus (Haywood Road) / Johnston Boulevard	22 6.156	13-0404	US 19-23 Bus (Haywood Road) at SR 3412 (Sand Hill Road / Vermont Avenue)	88	6.164	13-0814	NC 280 (Airport Road) at I-26 EB Ramps	153	6.082
	IC 191 (Brevard Road) at US 19-23 Bus (Haywood Road)	23 6.165		US 74A (S Tunnel Road) at NC 81 (Swannanoa River Road)	89	6.184		NC 280 (Airport Road) at I-26 WB Ramps US 40 23 (Smaller) Bod (Hilliam Drive)	154	6.082
	IS 19-23 Bus (Haywood Road) at SR 1332 (Louisiana Avenue)	24 6.165 25 6.165		US 74A (Charlotte Highway) at SR 2132 (Rose Hill Road) / Cedarwood Drive US 74A (S Tunnel Road) at Whole Foods Market	90	6.227 6.186	13-0816	US 19-23 (Smokey Park Highway) at SR 1233/SR 3613 (Rutherford Road/Hilltop Drive) US 19-23-74A (Patton Avenue) at Bear Creek Road	155 156	6.139 6.153
	IS 19-23 Bus (Haywood Road) at State Street / Majestic Avenue IS 19-23 Bus (Haywood Road) at Hanover Street / I-26 / I-240 On Ramp	26 6.167	13-0417	US 70 (Tunnel Road) at SR 2403 (Lower Grassy Branch Road)	91	6.203	13-0010	NC 280 (Airport Road) at SR 3568 (Rockwood Road)	157	6.083
	R 1332 (N. Louisiana Avenue) at Hazel Mill Road	27 6.293	13-0421	US 25 (Hendersonville Road) at Gold's Gym / Publix	92	6.030	13-0820	NC 280 (Airport Road) at SR 3500 (Notembou Road)	158	6.086
	IS 19-23 74A (Patton Avenue) at SR 1332 Louisiana Avenue	28 6.159	13-0432	US 19-23 (Smokey Park Highway) at SR 1245 (Acton Circle)	94	6.144	13-0822	NC 280 (Airport Road) at SR 3522 (Old Shoals Road)	159	6.088
	IS 19-23 74A (Patton Avenue) at NC 63 (Leicester Highway)	29 6.257	13-0435	US 70-74A (Tunnel Road) at I-240 EB Exit Ramp / I-240 WB On Ramp	95	6.189	13-0823	US 19-23 74A (Smokey Park Highway) at Ingles	160	6.149
	IS 25 (Merrimon Avenue) at E. Chestnut Street	30 6.056	13-0437	US 25 (Merrimon Avenue) at Larchmont Road	96	6.061	13-0830	NC 280 (Airport Road) at SR 3527 / SR 3529 (Rutledge Road) / Bradley Branch Road	161	6.086
	IS 25 (Merrimon Avenue) at Hillside Street	31 6.057	13-0439	US 25 (Hendersonville Road) at SR 3551 (Heywood Road) / Royal Pines Drive	97	6.022	13-0836	US 74 (S Tunnel Road) at Asheville Mall / Asheville Market	162	6.186
13-0224 U	IS 25 (Merrimon Avenue) at Coleman Avenue	32 6.058	13-0441	Fairview Road at I-240 WB Ramps / River Ridge Drive	98	6.218	13-0837	NC 191 (Brevard Road) at Blue Ridge Parkway Ramp	163	6.114
13-0225 U	IS 25 (Merrimon Avenue) at W.T. Weaver Boulevard	33 6.059	13-0443	US 25 (Hendersonville Road) at Busbee Road	99	6.040	13-0839	NC 191 (Brevard Road) at SR 3480 (Bent Creek Ranch Road)	164	6.115
13-0226 U	S 25 (Merrimon Avenue) at Chatham Road/Murdock Avenue	34 6.059	13-0444	NC 146 (Long Shoals Road) at SR 3503 (Overlook Road)	100	6.107	13-0854	NC 192 (Brevard Road) at Pole Creaseman Road	165	6.117
13-0227 U	S 25 (Merrimon Avenue) at Edgewood Road	35 6.060	13-0449	US 25 (Merrimon Avenue) at I-240 WB Exit Ramp	101	6.055	13-0868	US 19-23-74A (Patton Avenue) at Old Haywood Road	166	6.151
	S 25 (Merrimon Avenue) at Gracelyn Road / Colonial Place	36 6.061	13-0450	SR 1781 (Broadway) N. Lexington Avenue at I-240 WB Entrance Ramp	102	6.055	13-0870	US 25A (Sweeten Creek Road) at Wesley Drive	167	6.270
	S 25 (Merrimon Avenue) at Ottari Road	37 6.062	13-0451	US 19-23 (Smokey Park Highway) at I-40 EB Ramps / Acton Circle	103	6.146	13-0893	SR 3187 (Pensacola Avenue) at US 25A (Sweeten Creek Road)	168	6.018
	IS 25 (Merrimon Avenue) at SR 2230 (Osborne Road / Beaverdam Road)	38 6.062	13-0453	US 74A (Charlotte Highway) at Reynolds MS / Rocket Drive	104	6.228	13-0904	US 70-74A (Tunnel Road) at Ingles	169	6.190
	IS 70-74A (Tunnel Road) at SR 2042 (Chunns Cove Road)	39 6.190	13-0455	US 70 (Tunnel Road) at NC 81 (Swannanoa River Road) / Knauth Road	105	6.199	13-0920	US 19-23 74A (Patton Avenue) at Regent Park Boulevard / I-26 Ramps / I-240	170	6.161
	IS 70-74A (Tunnel Road) at Kenilworth Road / Kenilworth Knoll	40 6.188	13-0457 13-0459	NC 191 (Brevard Road) at NC 112 (Sardis Road)	106	6.121 6.187	13-0941	NC 191 (Brevard Road) at SR 3642 (Park S Boulevard) / Commerce Way	171	6.092
	IS 70-74A (Tunnel Road) at White Pine Drive IS 70 (Tunnel Road) at Beverly Road	41 6.187 42 6.196	13-0459	US 70 (Tunnel Road) at US 74A (S Tunnel Road) US 25 (McDowell Street) at Memorial Mission Hospital / Anna Woodfin Drive	107 108	6.296	13-0951 13-0954	US 25 (Hendersonville Road) at Gerber Road  NC 146 (Long Shoals Road) at Linamar Entrance	172 173	6.029 6.108
	IS 70 (Tunnel Road) at SR 2006 (Maple Springs Road) / Governors View Road	43 6.198	13-0461	SR 3214 (Biltmore Avenue) at Granby Street / Rose Chapman Drive	109	6.049	13-0955	SR 3556 (Meadow Road) at Victoria Road	174	6.176
	IC 81 (Swannanoa River Road) at Glendale Avenue	44 6.182	13-0464	US 19-23 (Smokey Park Highway) at NC 151 (Dogwood Road / Pisgah Highway)	110	6.136	13-0970	I-240 EB Ramps at US 25 (Merrimon Avenue) / Broadway	175	6.054
	IS 25 (Hendersonville Road) at Hotel Entrance/Arby's	46 6.045	13-0465	I-240 EB Ramps / Home Depot at SR 3238 (Fairview Road)	111	6.216	13-0977	US 25 (Hendersonville Road) at Caribou Road	176	6.038
	IS 25 (Hendersonville Road) at Vanderbilt Road / All Souls Crescent	47 6.046	13-0466	NC 191 (Brevard Road) at SR 3414 (E. Oakview Road) / Farmers Market	112	6.129	13-0984	US 25 (Hendersonville Road) at Hollywood Cinemas / Peachtree Road	177	6.031
	IC 81 (Hendersonville Road) at US 25A (Lodge Steet)	48 6.046	13-0468	US 19-23 74A (Smokey Park Highway) at I-40 WB Ramps	113	6.146	13-0992	Haywood Street / O'Henry Street at I-240 EB Entrance / Exit Ramp	178	6.333
	R 3214 (Biltmore Avenue) at NC 81/SR 3556 (Meadow Road) / Bryson Street	49 6.047	13-0498	US 19-23 74A (Smokey Park Highway) at SR 1404 (Old Haywood Road)	114	6.147	13-0994	NC 191 (Brevard Road) at SR 3486 (Avery Creek Road) / Southwicke Drive / Glenn Bridge R	179	6.090
13-0245 U	IS 25 (McDowell Street) at Choctaw Street	50 6.282	13-0505	NC 63 (Leicester Highway) at SR 1822 (Mount Carmel Road) / Fallen Spruce Drive	115	6.246	13-1003	SR 1368 (Lee's Creek Road) at SR 1369 (Old County Home Road)	180	6.260
	S 25 (McDowell Street) / Asheland Avenue at Southside Avenue / Phifer Street	51 6.282	13-0508	US 25 (Hendersonville Road) at Turtle Creek Drive / Weirbridge Drive	116	6.030	13-1011	Overlook Road at Pinchot Drive / Springside Road	181	6.320
	S 25 (Southside Avenue) at Short Coxe Avenue / Coxe Avenue	52 6.283		US 25 (Hendersonville Road) at Lambeth Drive / Walmart	117	6.032	13-1023	SR 1781 (Broadway) at Zillicoa Street / Campus Drive	182	6.067
	S 25 (Biltmore Avenue) at SR 3214 (Charlotte Street) / Southside Avenue	53 6.052	13-0514	NC 191 (Brevard Road) at I-26 EB Ramps	118	6.123	13-1029	US 19-23 74A (Patton Avenue) at I-240 EB Exit Ramp / I-26 SB Ramp	183	6.276
	IS 25 (Biltmore Avenue) at Hilliard Avenue	54 6.175		Fairview Road at Oakley Plaza	119	6.218	13-1041	SR 3284 (Charlotte Street) at Beaumont Street / Max Street	184	6.285
	IS 25 (Biltmore Avenue) at Aston Street	55 6.053	13-0525	SR 1781 (Broadway) at W.T. Weaver Boulevard	120	6.066	13-1059	US 25 (Hendersonville Road) at Skyland Crest Shopping Center / Oak Forest Boulevard	185	6.026
	IS 25 (Broadway) at Walnut Street	56 6.054 57 6.054	13-0528	US 25 (Hendersonville Road) at Biltmore Parkway Centre / Carolina Day School US 25 (Hendersonville Road) at SP 3506 (Springside Drive) / Herman Avenue	121	6.034	13-1065	SR 3276 (Wood Avenue) at River Hills Shopping Center  NC 280 (Airport Road) at J & S Cafeteria Airport Park Road / Terminal Drive	186	6.312
	IS 25 (Broadway) at Woodfin Street Voodfin Street at I-240 EB On Ramp / Market Street	57 6.054 58 6.054	13-0529 13-0530	US 25 (Hendersonville Road) at SR 3506 (Springside Drive) / Herman Avenue SR 3446 (Enka Lake Road) at NC 122 (Sand Hill Road)	122 123	6.025 6.234	13-1110	US 25A (Sweeten Creek Road) at SR 3079 (Roberts Road)	187 188	6.081 6.212
	IS 70 (Charlotte Street) at I-240 EB/WB Ramp	59 6.287	13-0553	US 25 (Weaverville Road) at US 19-23 New Bridge / N. Merrimon Avenue	123	6.076	13-1119	US 19-23 74A (Smokey Park Highway) at Lowes Parking Lot Entrance	189	6.212
	IS 19-23 74A (Patton Avenue) at SR 3548 (Clingman Avenue)	60 6.276	13-0554	US 74A (Charlotte Highway) at SR 3071 (Avondale Road)	125	6.224	13-1122	US 74A (S Tunnel Road) at Entrance to Lowes	190	6.185
	IS 70-74A (College Street) at NC 694 (Town Mountain Road) / Martin Luther King Jr. Drive	61 6.291	13-0555	NC 191 (Brevard Road) at NC 146 (Long Shoals Road) / Vista Boulevard	126	6.090	13-1126	NC 146 (Long Shoals Road) at Schenck Pkwy / Skyland Inn Drive	191	6.103
	IS 25 (Broadway Street) at College Street	62 6.053	13-0556	NC 63 (Leicester Highway) at SR 1004 (Newfound Road) /SR 1357 (Dix Creek Chapel Road)	127	6.241	13-1129	US 19-23 74A (Patton Avenue) at Parkwood Place/ Wilburn Road	192	6.156
	IS 25 (Biltmore Avenue) at North Pack Square	63 6.053	13-0559	Monte Vista Road at Acton Circle	128	6.315	13-1162	US 19-23 (Smokey Park Highway) at Westridge Market Place	193	6.141
	IS 19-23 74A (Patton Avenue) at Deaverview Road	64 6.155	13-0561	SR 3530 (Watson Road) at US 25 (Hendersonville Road)	129	6.015	13-1165	US 25A (Sweeten Creek Road) at Medical Park Drive	194	6.211
13-0277 S	R 1781 (Broadway) at Chestnut Street / Mt. Clare Avenue	65 6.063	13-0566	US 25A (Sweeten Creek Road) at SR 3185 (Rathfarnham Road)	130	6.265	13-1170	US 25 (Hendersonville Road) at Walden Ridge Drive/South Pointe Centre	195	6.028
13-0278 U	IS 19-23 SB Ramps / I-26 EB Ramps at NC 251 (Riverside Drive)	66 6.068	13-0576	SR 1368 (Lee's Creek Road) at SR 1367 (Erwin Hills Road)	131	6.259	13-1185	NC 280 (Airport Road) at Target / McKenna Road	196	6.084
13-0270 0							_			

NCDOT SIGNAL INVENTORY	INTERSECTION	SIGNAL SHEET NUMBER	CABLE ROUTING SHEET NUMBER
13-1186	NC 81 (Swannanoa River Road) at Bleachery Boulevard / Wal-Mart Supercenter	197	6.297
13-1187	SR 3238(Fairview Road) at Bleachery Boulevard / Old Fairview Road	198	6.216
13-1193	US 25 (Hendersonville Road) at Valley Springs Road / Deerlake Drive	199	6.032
13-1194	SR 3556 (Meadow Road) at Short McDowell Street	200	6.178
13-1195	US 25 (Hendersonville Road) at Raquet Club Road	201	6.031
13-1197	NC 280 (Airport Road) at Wal-Mart Supercenter / Birch Circle	202	6.087
13-1207	NC 191 (Brevard Road) at Entrance to Borg-Warner / Industrial Drive	203	6.093
13-1209	US 19 Bus (Weaverville Road) at Senator Reynolds Road / Woodfin Avenue	204	6.075
13-1214	US 74A (Charlotte Highway) at Old Charlotte Highway / Ingles	205	6.229
13-1215	NC 112 (Sand Hill Road) at SR 3437 (Lake Drive / Ent To Colbond)	206	6.235
13-1216	NC 146 (Long Shoals Road) at I-26 Ramps	207	6.102
13-1217	US 25 (Hendersonville Road) at Gerber Village	208	6.029
13-1218	NC 112 (Sand Hill Road) at Southeastern Container / Jacob Holm Way	209	6.238
13-1225	I-40 EB Ramps at SR 2838 (Porters Cove Road)	210	6.206
13-1226	SR 1368 (Lee's Creek Road) at Ent. To West Buncombe Elementary	211	6.259
13-1231	McDowell Street at Hospital Drive	212	6.172
13-1240	US 25 (Merrimon Avenue) at Harris Teeter Entrance	213	6.056
13-1244	NC 280 (Airport Road) at The Landing / Dick's Sporting Goods	214	6.085
13-1245	NC 81 (Swannanoa River Road) at Azalea Road	215	6.310
13-1250	Sand Hill Road at Ingles / A-B Tech CC	216	6.233

NCDOT SIGNAL INVENTORY NUMBER	INTERSECTION	SIGNAL SHEET NUMBER	CABLE ROUTING SHEET NUMBER
13-1287	Sand Hill School Road at NC 112 (Sand Hill Road)	217	6.318
13-1288	I-240 EB Off Ramp/ Woodfin Place at Charlotte Street	218	6.287
14-0048	US 25 (Hendersonville Road) at SR 1360 (Old Airport Road) / Ingles	219	6.013
14-0585	US 25 (Hendersonville Road) at SR 1545 (Cane Creek Road) / Library Road	220	6.011
14-0595	US 25 (Hendersonville Road) at SR 1538 (Howard Gap Road)	221	6.009
14-0678	US 25 (Asheville Hwy) at South Naples Road	222	6.001C
14-0740	US 25 (Hendersonville Road) at SR 1358 (Fanning Bridge Road & Fletcher Fire Dept)	223	6.010
14-0742	US 25 (Hendersonville Road / Asheville Hwy) at SR 1345 (Butler Bridge Road)	224	6.003
14-0772	US 25 (Hendersonville Road) at SR 2025 (Rockwell Drive)	225	6.006
14-0852	US 25 (Asheville Hwy) at Rugby Drive	226	6.001A
14-0901	US 25 (Asheville Hwy) at I-26 EB Ramps	227	6.001
14-0902	US 25 (Asheville Hwy) at I-26 WB Ramps	228	6.001
14-1039	US 25 (Hendersonville Road) at SR 1361 (Baldwin Circle) / St. John Road	229	6.013
14-1050	US 25 (Asheville Hwy) at New Naples Road	230	6.001D
14-1145	US 25 (Hendersonville Road) at Smiley's Flea Market	231	6.004
14-1259	US 25 (Hendersonville Road) at SR 1537 (Old Brickyard Road)	232	6.005
14-1271	NC 280 (Boylston Hwy) at SR 2277 (Ferncliff Park Drive)	233	6.077
14-1278	US 25 (Hendersonville Road) at Mission / Pardee Health Campus (Alliance Page Road)	234	6.014
13-1283	NC 191 (Brevard Road) at PETCO	235	6.122
13-1284	NC 191 (Brevard Road) at I-26 Westbound Ramps	236	6.124

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

REVISIONS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Asheville Signal System
State Signal Plans Index Sheet

Division 13 Buncombe County Asheville
PLAN DATE: December 2016 REVIEWED BY: M B Toth
PREPARED BY: J A Wiles REVIEWED BY:

INIT. DATE

DocuSigned by

Melissa Z

DB60CF8E04Di

Docusigned by:

Melissa B. Toth
Date

CADD Filename: SIG 1.00C.dgn

JECT REFERENCE NO.	SHEET NO.
U-4715B	SIG.1.00D

CITY SIGNAL INVENTORY NUMBER	INTERSECTION	SIGNAL SHEET NUMBER	CABLE LAYOUT SHEET NUMBER
COA-001	N. Bear Creek Road at Deaverview Road	237.0	6.239
COA-002	State Street at Hanover Street	238.0	6.302
COA-004	Hazzard Street at Martin Luther King Drive	239.0	6.179
COA-005	W. Haywood St / Craven / Smith Br at Riverside Drive	240.0	6.274
COA-006	US 70 (Tunnel Road) at Fire Station #8	241.0	6.196
COA-007	Hospital Drive at Victoria Road / Hamilton Street	242.0	6.172
COA-008	Charlotte Street at E. Chestnut Street	243.0	6.288
COA-009	Charlotte Street at Hillside Street	244.0	6.289
COA-010	Evelyn Place at Kimberly Avenue / Edwin Place	245.0	6.313
COA-011	Fairview Road at Glendale Avenue	246.0	6.231
COA-012	Fairview Road at Cedar Street / Oakley Elementary / Fire Station #9	247.0	6.216
COA-013	Fairview Road at Baldwin Street / Onteora Boulevard	248.0	6.216
COA-014	River Hills Center at River Hills Road	249.0	6.312
COA-015	Victoria Road at Lily Carmichael Drive	250.0	6.322
COA-016	Victoria Road at Fernihurst Drive	251.0	6.321
COA-025	Fairview Road at Third Street	252.0	6.230
COA-103	College Street at Spruce Street	253.0	6.053
COA-104	Market Street at College Street	254.0	6.053
COA-106	Lexington Avenue at College Street	255.0	6.332
COA-107	Haywood Street at College Street	256.0	6.332
COA-108	Coxe Avenue at Patton Avenue	257.0	6.331
COA-109	Asheland Avenue at Patton Avenue	258.0	6.331
COA-110	Otis Street at Patton Avenue	259.0	6.331
COA-111	French Broad Avenue at Patton Avenue	260.0	6.331
COA-113	Haywood Street at Patton Avenue	261.0	6.332
COA-114	Lexington Avenue at Patton Avenue	262.0	6.332
COA-118	Aston Street / Bus Depot at Asheland Avenue	263.0	6.331
COA-119	Aston Street / Bus Depot at Coxe Avenue	264.0	6.331
COA-201	Lexington Avenue at Hiawassee Street / Woodfin Street	265.0	6.054
COA-204	Lexington Avenue at Walnut Street	266.0	6.054
COA-301	S. Lexington Avenue at Hilliard Avenue	267.0	6.175
COA-302	Hilliard Avenue at Church Street	268.0	6.175
COA-303	Hilliard Avenue at Coxe Avenue	269.0	6.174
COA-304	Hilliard Avenue at Asheland Avenue	270.0	6.174
COA-305	Hilliard Avenue at S French Broad Avenue	271.0	6.174
COA-401	Flint Street / Page Avenue at Haywood Street	272.0	6.333
COA-403	Montford Avenue at Haywood Street	273.0	6.278
COA-404	I-240 Ramps / Cherry Street / Hill Street at Montford Avenue	274.0	6.278
COA-407	Montford Avenue at W. Chestnut Street	275.0	6.279
COA-409	Flint Street at Hiawassee Street	276.0	6.333
COA-411	Montford Avenue at Soco Street / Cullowhee Street	277.0	6.280

TKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Asheville Signal System

City Signal Plans Index Sheet

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: INIT. DATE REVISIONS

SEAL 025892 Melissa B. Toth

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CADD Filename: SIG 1.00D.dgn

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

|SIG.1.00| U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information													Controller, Cabinet & Foundation Work						1
				X On	2070 Contro		ype 170 Cabinet							Install New Controller & Cabinet						
				aas)			***************************************			ě				Install New Foundation				· · · · · · · · · · · · · · · · · · ·		
							000000000000000000000000000000000000000			Bas										
		Cable Routing Sheet Number	=	note at bottom of page)	New	Existing	New Existing	New Aux File for Cabinet No. of New Detector Cards	332	332 with Auxiliary File	336	Adjacent to Existing In Same Place as Existing	drant)		al Splice Box Foundation e Existing Foundation	Rotate Front of Cabinet clockwise (degrees)  Base Extender	Base Adapter	Pole (336S)	Ex. Heignt - Ground to Bottom (inches) Replace concrete (SF)	Replace Asphalt ** Replace Brick (SF)
1	13-0014 NC 63 (Leicester Highway) at SR 1369 (Old County Home Road)	6.248	1.0		1		1	5		1					1	1				
2	13-0031 US 70 (Tunnel Road) at I-240 EB Exit Ramp	6.191	2.0		1		1	0										1 3	33	
3	13-0032 US 70 (Tunnel Road) at I-240 EB Entrance Ramp	6.191	3.0		1		1	4		1						*				
4	13-0033 US 70 (Tunnel Road) at I-240 WB Entrance Ramp	6.191	4.0		1		1	2		1						1				
5	13-0034 US 70 (Tunnel Road) at I-240 WB Exit Ramp	6.191	5.0		1		1	2		1						*				
6	13-0037 NC 63 (Leicester Highway) at Old County Home / Evelake Road	6.254	6.0		1		1	6		1						*				
7	13-0041 US 19-23 74A (Patton Avenue) at Druid Drive / Laurel Loop	6.157	7.0		1		1	8		1						*				
8	13-0046 US 25 (Hendersonville Road) at SR 3495 (Glenn Bridge Road)	6.020	8.0		1		1	4		1						*				
9	13-0047 US 25A (Sweeten Creek Road) at SR 3081 (Rock Hill Road)	6.207	9.0		1		1	7		1						*				
10	13-0049 Haywood Road/ Ridgelawn Road at Beverly Road	6.169	10.0	•	1		1	9		1						*	••••			
11	13-0053 US 25 (Hendersonville Road) at SR 3081 (Rock Hill Road)	6.037	11.0		1		1	7		1				New cabinet pole			•			
12	13-0057 NC 63 (Leicester Highway) at SR 1318 (Eliada Home Road)	6.251	12.0		1		1	7		1						*				
13	13-0059 US 25 (Hendersonville Road) at Linamar	6.023	13.0	••••	1		1	4	•••••		***************************************							1 3	80	
14	13-0063 US 25 (Hendersonville Road) at SR 3116 (Mills Gap Road)	6.028	14.0	•••••••••••••••••••••••••••••••••••••••	1		1	9	•••••								***************************************	1 3	30	
15	13-0066 US 25 (McDowell Street) at Doctors Drive	6.296	15.0		1		1	4										1 3	80	
16	13-0068 US 70 (Tunnel Road) at SR 2032 (New Haw Creek Road)	6.193	16.0		1		1	8		1						*				
17	13-0073 NC 191 (Brevard Road) at I-240 WB Ramps	6.272	17.0	•••••••••••••••••••••••••••••••••••••••	1		1	5		1						1				
18	13-0132 US 25 (Merrimon Avenue) at Elkmont Drive / Elkwood Avenue	6.074	18.0		1		1	5		1		<u> </u>				*				
19	13-0136 US 25 (McDowell Street) at Short McDowell Street / St. Dunstans Road	6.295	19.0		1		1	11		1						*				
20	13-0137 SR 1373 (Old County Home) at SR 1369 (Mount Carmel Road)	6.258	20.0		1		1	4										1 2	29	
21	13-0149 US 70 (Tunnel Road) at SR 2838 (Porters Cove Road)	6.205	21.0		1		1	5										1 2	25	
22	13-0214 US 19-23 74A (Patton Avenue) at US 19-23 Bus (Haywood Road) / Johnston Boulevard	6.156	22.0		1		1	10		1						*				
23	13-0215 NC 191 (Brevard Road) at US 19-23 Bus (Haywood Road)	6.165	23.0	Υ	1		1	6		1						*			10	
24	13-0216 US 19-23 Bus (Haywood Road) at SR 1332 (Louisiana Avenue)	6.165	24.0		1		1	5										1 4	2	

\*Reuse Existing

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

- Work shown on this sheet is for the upgrade of the traffic signals, including installation of new controllers and cabinets, new or modified foundations, electrical service and miscellaneous signal related items. Additional information can be found in the signal plans in this Volume. Work to be done for fiber-optic cable routing and interconnection is shown on the cable layout plans and on the sheets entitled "Summary of Work by Cable Layout Plans" in Volume I of III.

- The items listed above are for informational purposes only and represent work that is necessary to complete the contract and are not necessarily pay items. See Summary of Quantites and the Project Special Provisions for defined Pay Items for this contract.

This area has been determined to contain properties with documented historic significance. If it is necessary to deviate from these plans in this area, alert the Engineer to contact Project Development and Environmental Analysis Branch - Historic Architecture Group of the North Carolina <u>Department of Transportation</u> for an effects determination before proceeding.



Transportation

NA

Asheville Signal System Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE 025892

Melissa B. Toth \_\_\_\_D86DCF8E04D04AF... -CADD Filename: SIG 1.00E.dgn

|SIG.1.00| U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information									*Cor	nduit and	Riser Wo	rk					Power Service								
	NCDOT / City Signal Inv. No. Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area note at bottom of page)	Drill / Core Drill for 1" for New Power Service	Drill / Core Drill for 2" for FO or CAT5/24VAC Reuse Ex. 1" (pole) or 2" (base) ST Dedicated Riser for	se Ex. 2"	Use 2" Spare Conduit for UG Comm	2" Rji	New 1-1/4" Riser (HST) for Comm to pole mtd cabinet	New UG Conduit for Comm Entrance New Cabinet Entrance in New Foundation for Comm	WH) for Sig- Pedestrian	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	New 2" Risers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing)	t Risers for Sig (from terminal splic	Modify Existing Power Service - Install New Service Wires in Existing Conduit	Modify Existing Power Service - Install New Service Wires in New Conduit	Power Company to Provide Meter	Modify Existing Disconnect for New CCTV Power Service #	Install Service Disconnect by Signal Cabinet Remove Backup Generator Equipment Install Backup Generator connection	Install 5/8" x 10' Grounding Electrode Install New Electrical Service			
1	13-0014 NC 63 (Leicester Highway) at SR 1369 (Old County Home Road)	6.248	1.0						1		1	•			-						<b>-</b>					
2	13-0031 US 70 (Tunnel Road) at I-240 EB Exit Ramp	6.191	2.0				1																1			
3	13-0032 US 70 (Tunnel Road) at I-240 EB Entrance Ramp	6.191	3.0			1					1												1			
4	13-0033 US 70 (Tunnel Road) at I-240 WB Entrance Ramp	6.191	4.0			1					1												1			
5	13-0034 US 70 (Tunnel Road) at I-240 WB Exit Ramp	6.191	5.0			1	***************************************				1												1			
6	13-0037 NC 63 (Leicester Highway) at Old County Home / Evelake Road	6.254	6.0			1					1															
7	13-0041 US 19-23 74A (Patton Avenue) at Druid Drive / Laurel Loop	6.157	7.0			1																				
8	13-0046 US 25 (Hendersonville Road) at SR 3495 (Glenn Bridge Road)	6.020	8.0			1	***************************************																			
9	13-0047 US 25A (Sweeten Creek Road) at SR 3081 (Rock Hill Road)	6.207	9.0				1																			
10	13-0049 Haywood Road/ Ridgelawn Road at Beverly Road	6.169	10.0				***************************************		1																	
11	13-0053 US 25 (Hendersonville Road) at SR 3081 (Rock Hill Road)	6.037	11.0			1	***************************************																			
12	13-0057 NC 63 (Leicester Highway) at SR 1318 (Eliada Home Road)	6.251	12.0			1	***************************************		1																	
13	13-0059 US 25 (Hendersonville Road) at Linamar	6.023	13.0				***************************************			1																
14	13-0063 US 25 (Hendersonville Road) at SR 3116 (Mills Gap Road)	6.028	14.0				***************************************			1																
15	13-0066 US 25 (McDowell Street) at Doctors Drive	6.296	15.0							1			1													
16	13-0068 US 70 (Tunnel Road) at SR 2032 (New Haw Creek Road)	6.193	16.0				***************************************		1																	
17	13-0073 NC 191 (Brevard Road) at I-240 WB Ramps	6.272	17.0			1	***************************************		1											1						
18	13-0132 US 25 (Merrimon Avenue) at Elkmont Drive / Elkwood Avenue	6.074	18.0								1															
19	13-0136 US 25 (McDowell Street) at Short McDowell Street / St. Dunstans Road	6.295	19.0			1					1															
20	13-0137 SR 1373 (Old County Home) at SR 1369 (Mount Carmel Road)	6.258	20.0				***************************************				1											***************************************				
21	13-0149 US 70 (Tunnel Road) at SR 2838 (Porters Cove Road)	6.205	21.0				***************************************			1																
22	13-0214 US 19-23 74A (Patton Avenue) at US 19-23 Bus (Haywood Road) / Johnston Boulevard	6.156	22.0			1	·															***************************************				
23	13-0215 NC 191 (Brevard Road) at US 19-23 Bus (Haywood Road)	6.165	23.0	Y		1			1																	
24	13-0216 US 19-23 Bus (Haywood Road) at SR 1332 (Louisiana Avenue)	6.165	24.0				***************************************			1					***************************************	3										

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

- Work shown on this sheet is for the upgrade of the traffic signals, including installation of new controllers and cabinets, new or modified foundations, electrical service and miscellaneous signal related items. Additional information can be found in the signal plans in this Volume. Work to be done for fiber-optic cable routing and interconnection is shown on the cable layout plans and on the sheets entitled "Summary of Work by Cable Layout Plans" in Volume I of III.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth

Asheville REVIEWED BY:

INIT. DATE

025892

-CADD Filename: SIG 1.00F.dgn

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

Transportation

NA

REVISIONS

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information													;	Signal	Items										
		Cable Layout Sheet Number	Signal Design Sheet Number	ıt area (see box	an Signal Head	id signal Head	ad	P <sub>1</sub>								λlα	ifion		System -		Detector Station			arking Lines (8", 120 MILS)	ır 24", 120 MILS	alk Line 24", 120 MILS
	NCDOT / City Signal Inv. No. Intersection Name	INGILIDEI	INGITIDE	In / near historically significar note at bottom of page)	16-inch Countdown Pedestri	12-inch 3-Section Signal Hear	12-inch 4-Section Signal Hea	12-inch 5-Section Signal Hea	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	ndard	Type I Post with Foundation Type II Pedestal with Founda	ပ	Microwave Vehicle Detection	Multiple Zones APS Detector Station	Central Control Unit for APS D	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement M	Thermoplastic White Stop Be	Thermoplastic White Crossw Remove Line 24"
1	13-0014 NC 63 (Leicester Highway) at SR 1369 (Old County Home Road)	6.248	1.0			1	1		400																***************************************	
2	13-0031 US 70 (Tunnel Road) at I-240 EB Exit Ramp	6.191	2.0	•	•																			•		
3	13-0032 US 70 (Tunnel Road) at I-240 EB Entrance Ramp	6.191	3.0		•																					
4	13-0033 US 70 (Tunnel Road) at I-240 WB Entrance Ramp	6.191	4.0																						***************************************	
5	13-0034 US 70 (Tunnel Road) at I-240 WB Exit Ramp	6.191	5.0																						***************************************	
6	13-0037 NC 63 (Leicester Highway) at Old County Home / Evelake Road	6.254	6.0		•	1	1		260				500													
7	13-0041 US 19-23 74A (Patton Avenue) at Druid Drive / Laurel Loop	6.157	7.0		•	2			400																	
8	13-0046 US 25 (Hendersonville Road) at SR 3495 (Glenn Bridge Road)	6.020	8.0															2								
9	13-0047 US 25A (Sweeten Creek Road) at SR 3081 (Rock Hill Road)	6.207	9.0			2	2		300																	
10	13-0049 Haywood Road/ Ridgelawn Road at Beverly Road	6.169	10.0	<b>.</b>	•																					
11	13-0053 US 25 (Hendersonville Road) at SR 3081 (Rock Hill Road)	6.037	11.0		•																					
12	13-0057 NC 63 (Leicester Highway) at SR 1318 (Eliada Home Road)	6.251	12.0																							
13	13-0059 US 25 (Hendersonville Road) at Linamar	6.023	13.0																							
14	13-0063 US 25 (Hendersonville Road) at SR 3116 (Mills Gap Road)	6.028	14.0																							
15	13-0066 US 25 (McDowell Street) at Doctors Drive	6.296	15.0																							
16	13-0068 US 70 (Tunnel Road) at SR 2032 (New Haw Creek Road)	6.193	16.0																							
17	13-0073 NC 191 (Brevard Road) at I-240 WB Ramps	6.272	17.0																							
18	13-0132 US 25 (Merrimon Avenue) at Elkmont Drive / Elkwood Avenue	6.074	18.0																						***************************************	
19	13-0136 US 25 (McDowell Street) at Short McDowell Street / St. Dunstans Road	6.295	19.0			2	2		600																	
20	13-0137 SR 1373 (Old County Home) at SR 1369 (Mount Carmel Road)	6.258	20.0																						***************************************	
21	13-0149 US 70 (Tunnel Road) at SR 2838 (Porters Cove Road)	6.205	21.0			2	1		400																***************************************	
22	13-0214 US 19-23 74A (Patton Avenue) at US 19-23 Bus (Haywood Road) / Johnston Boulevard	6.156	22.0								3														0	
23	13-0215 NC 191 (Brevard Road) at US 19-23 Bus (Haywood Road)	6.165	23.0	Y		2	1		450																	
24	13-0216 US 19-23 Bus (Haywood Road) at SR 1332 (Louisiana Avenue)	6.165	24.0		4	1	1		800				600				4			4	1	50				

- Work shown on this sheet is for the upgrade of the traffic signals, including installation of new controllers and cabinets, new or modified foundations, electrical service and miscellaneous signal related items. Additional information can be found in the signal plans in this Volume. Work to be done for fiber-optic cable routing and interconnection is shown on the cable layout plans and on the sheets entitled "Summary of Work by Cable Layout Plans" in Volume I of III.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Transportation

NA

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County

REVISIONS

Asheville REVIEWED BY:

INIT. DATE

025892

CADD Filename: SIG 1.00G.dgn

- The items listed above are for informational purposes only and represent work that is necessary to complete the contract and are not necessarily pay items. See Summary of Quantites and the Project Special Provisions for defined Pay Items for this contract.

PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

## SUMMARY OF WORK BY INTERSECTION

	Reference Information																				
					207 Contro		pe 170 abinet							Install New Controller & Cabinet							
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						Ψ G			Install New Foundation			(səa				
	NCDOT / City signal Inv. No. Intersection Name	Cable Routing Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	New	Existing New	Existing	File for Cat	No. of New Detector Cards	332	332 with Auxiliary File Bas	acent to Existing	lace as EXIS	Relocated to (quadrant)  The many to the m	Terminal Splice Box	Modify Foundation Remove Existing Foundation	of Cabinet c	Base Extender	Pole (336S)  Ex Height - Ground to Bottom (inches)		Replace Asphalt ** Replace Brick (SF)
25	13-0217 US 19-23 Bus (Haywood Road) at State Street / Majestic Avenue	6.165	25.0		1	1	***************************************		4		***************************************								1 30		
26	13-0218 US 19-23 Bus (Haywood Road) at Hanover Street / I-26 / I-240 On Ramp	6.167	26.0	Υ	1	1		,	11		1							*			
27	13-0219 SR 1332 (N. Louisiana Avenue) at Hazel Mill Road	6.293	27.0		1	1			4									•	1 28		
28	13-0220 US 19-23 74A (Patton Avenue) at SR 1332 Louisiana Avenue	6.159	28.0		1	1		,	16		1							*			
29	13-0221 US 19-23 74A (Patton Avenue) at NC 63 (Leicester Highway)	6.257	29.0	•	1	1		,	11		1							*			
30	13-0222 US 25 (Merrimon Avenue) at E. Chestnut Street	6.056	30.0	Υ	1	1			6		1			foundation in sidewalk				1			
31	13-0223 US 25 (Merrimon Avenue) at Hillside Street	6.057	31.0	Υ	1	1			5		1							1			
32	13-0224 US 25 (Merrimon Avenue) at Coleman Avenue	6.058	32.0		1	1			6		1						•	*			
33	13-0225 US 25 (Merrimon Avenue) at W.T. Weaver Boulevard	6.059	33.0		1	1			4		1							*			
34	13-0226 US 25 (Merrimon Avenue) at Chatham Road/Murdock Avenue	6.059	34.0		1	1			5										1 21		
35	13-0227 US 25 (Merrimon Avenue) at Edgewood Road	6.060	35.0		1	1			4		1							*			
36	13-0228 US 25 (Merrimon Avenue) at Gracelyn Road / Colonial Place	6.061	36.0		1	1		,	10		1							1			
37	13-0229 US 25 (Merrimon Avenue) at Ottari Road	6.062	37.0		1	1			4		1							*			
38	13-0230 US 25 (Merrimon Avenue) at SR 2230 (Osborne Road / Beaverdam Road)	6.062	38.0		1	1			6		1							1			
39	13-0231 US 70-74A (Tunnel Road) at SR 2042 (Chunns Cove Road)	6.190	39.0		1	1		,	10		1							*			
40	13-0232 US 70-74A (Tunnel Road) at Kenilworth Road / Kenilworth Knoll	6.188	40.0		1	1			8		1							1			
41	13-0233 US 70-74A (Tunnel Road) at White Pine Drive	6.187	41.0		1	1		,	11		1							1			
42	13-0234 US 70 (Tunnel Road) at Beverly Road	6.196	42.0		1	1	***************************************		9		1			Retain sig risers & foundation as is; add FO riser into side of base extender; replace 1" service riser into side of base extender				1			
43	13-0235 US 70 (Tunnel Road) at SR 2006 (Maple Springs Road) / Governors View Road	6.198	43.0		1	1			5	•	1							*			
44	13-0237 NC 81 (Swannanoa River Road) at Glendale Avenue	6.182	44.0		1	1			1										1 40		
45	13-0240 US 25 (Hendersonville Road) at Hotel Entrance/Arby's	6.045	46.0		1	1			11		1							*			
46	13-0241 US 25 (Hendersonville Road) at Vanderbilt Road / All Souls Crescent	6.046	47.0	Υ	1	1		•	10	•••••	1			Cabinet to have special coating. See PSPs.				*			
47	13-0242 NC 81 (Hendersonville Road) at US 25A (Lodge Steet)	6.046	48.0	Υ	1	1			9		1			Cabinet to have special coating. See PSPs.				*			
48	13-0243 SR 3214 (Biltmore Avenue) at NC 81/SR 3556 (Meadow Road) / Bryson Street	6.047	49.0		1	1		1	10		1			Existing "adapter" is not standard				1			

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Transportation

NA

Asheville Signal System Summary of Work by

REVISIONS

Intersection (sheet 1 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Melissa B. Toth \_\_\_\_D86DCF8E04D04AF... -CADD Filename: SIG 1.00H.dgn

INIT. DATE

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information									*	*Conduit and F	iser Wor	rk								Pow	er Ser	vice			
	NCDOT / Cit Signal Inv. No		Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	Drill / Core Drill for 1" for New Power Service	Drill / Core Drill for 2" for FO or CAT5/24VAC	Reuse Ex. 1" (pole) or 2" (base) ST Dedicated Riser for Comm (Retrofit Kit) Reuse Ex. 2" (or 3") Dedicated Conduit Entrance	Conduit for 112 Comm	Spare Corriduit for G	_ LE	nduit for Comm Entrance	New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundationocation	New 2" Risers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing)	ort Risers for Sig (from terminal splic		Modify Existing Power Service - Install New Service	New Conduit	Modify Existing Disconnect for New CCTV Power	nstall Service Disconnect by Signal Cabinet	Remove Backup Generator Equipment	Backup Generator connect		nstall New Electrical Service
25	13-0217	US 19-23 Bus (Haywood Road) at State Street / Majestic Avenue	6.165	25.0	<u> </u>				<b>4</b>		1	1	<u> </u>						<u> </u>		<u> L</u>		<u> </u>	<u> </u>		_	
26	13-0218	US 19-23 Bus (Haywood Road) at Hanover Street / I-26 / I-240 On Ramp	6.167	26.0	Υ			WO		1															***************************************		
27	13-0219	SR 1332 (N. Louisiana Avenue) at Hazel Mill Road	6.293	27.0	***************************************			VOQ			1	1													***************************************		
28	13-0220	US 19-23 74A (Patton Avenue) at SR 1332 Louisiana Avenue	6.159	28.0				1																	***************************************		
29	13-0221	US 19-23 74A (Patton Avenue) at NC 63 (Leicester Highway)	6.257	29.0				1											•••••••••••••••••••••••••••••••••••••••								
30	13-0222	US 25 (Merrimon Avenue) at E. Chestnut Street	6.056	30.0	Υ			1	•				***************************************														
31	13-0223	US 25 (Merrimon Avenue) at Hillside Street	6.057	31.0	Υ			1					-														
32	13-0224	US 25 (Merrimon Avenue) at Coleman Avenue	6.058	32.0		·····						1															
33	13-0225	US 25 (Merrimon Avenue) at W.T. Weaver Boulevard	6.059	33.0				1																			
34	13-0226	US 25 (Merrimon Avenue) at Chatham Road/Murdock Avenue	6.059	34.0	9			***************************************				1													***************************************		
35	13-0227	US 25 (Merrimon Avenue) at Edgewood Road	6.060	35.0	***************************************			1																			
36	13-0228	US 25 (Merrimon Avenue) at Gracelyn Road / Colonial Place	6.061	36.0				1																			***************************************
37	13-0229	US 25 (Merrimon Avenue) at Ottari Road	6.062	37.0				1																			
38	13-0230	US 25 (Merrimon Avenue) at SR 2230 (Osborne Road / Beaverdam Road)	6.062	38.0					1																***************************************		
39	13-0231	US 70-74A (Tunnel Road) at SR 2042 (Chunns Cove Road)	6.190	39.0				1																			
40	13-0232	US 70-74A (Tunnel Road) at Kenilworth Road / Kenilworth Knoll	6.188	40.0				1																			
41	13-0233	US 70-74A (Tunnel Road) at White Pine Drive	6.187	41.0	***************************************			1					***************************************												***************************************		
42	13-0234	US 70 (Tunnel Road) at Beverly Road	6.196	42.0	***************************************					1													***************************************	***************************************	***************************************		
43	13-0235	US 70 (Tunnel Road) at SR 2006 (Maple Springs Road) / Governors View Road	6.198	43.0						1																	
44	13-0237	NC 81 (Swannanoa River Road) at Glendale Avenue	6.182	44.0							1	1															
45	13-0240	US 25 (Hendersonville Road) at Hotel Entrance/Arby's	6.045	46.0	***************************************								***************************************												***************************************		
46	13-0241	US 25 (Hendersonville Road) at Vanderbilt Road / All Souls Crescent	6.046	47.0	Y			1																			
47	13-0242	NC 81 (Hendersonville Road) at US 25A (Lodge Steet)	6.046	48.0	Y				1																		
48	13-0243	SR 3214 (Biltmore Avenue) at NC 81/SR 3556 (Meadow Road) / Bryson Street	6.047	49.0	***************************************				1				***************************************											***************************************	***************************************		

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

025892

Melissa B. Toth NA\_\_\_\_D86DCF8E04D04AF... CADD Filename: SIG 1.00I.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information															Signa	ıl Items	3									
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	Standard Down Guy Assembly	Type I Postwith Foundation	Type II Pedestal with Foundation	Junction Box Microwave Vehicle Detection	System - Multiple Zones	Central Control Unit for APS Detector Station	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
25	13-0217	US 19-23 Bus (Haywood Road) at State Street / Majestic Avenue	6.165	25.0					2		300																	
26	13-0218	US 19-23 Bus (Haywood Road) at Hanover Street / I-26 / I-240 On Ramp	6.167	26.0	Y		2		2		300																	
27	13-0219	SR 1332 (N. Louisiana Avenue) at Hazel Mill Road	6.293	27.0																								
28	13-0220	US 19-23 74A (Patton Avenue) at SR 1332 Louisiana Avenue	6.159	28.0			1				80																	
29	13-0221	US 19-23 74A (Patton Avenue) at NC 63 (Leicester Highway)	6.257	29.0			1				160																	
30	13-0222	US 25 (Merrimon Avenue) at E. Chestnut Street	6.056	30.0	Υ																							
31	13-0223	US 25 (Merrimon Avenue) at Hillside Street	6.057	31.0	Υ																							
32	13-0224	US 25 (Merrimon Avenue) at Coleman Avenue	6.058	32.0																								
33	13-0225	US 25 (Merrimon Avenue) at W.T. Weaver Boulevard	6.059	33.0																								
34	13-0226	US 25 (Merrimon Avenue) at Chatham Road/Murdock Avenue	6.059	34.0																								
35	13-0227	US 25 (Merrimon Avenue) at Edgewood Road	6.06	35.0																							***************************************	
36	13-0228	US 25 (Merrimon Avenue) at Gracelyn Road / Colonial Place	6.061	36.0																								
37	13-0229	US 25 (Merrimon Avenue) at Ottari Road	6.062	37.0																							***************************************	
38	13-0230	US 25 (Merrimon Avenue) at SR 2230 (Osborne Road / Beaverdam Road)	6.062	38.0																							***************************************	
39	13-0231	US 70-74A (Tunnel Road) at SR 2042 (Chunns Cove Road)	6.19	39.0																								
40	13-0232	US 70-74A (Tunnel Road) at Kenilworth Road / Kenilworth Knoll	6.188	40.0			2		2		600																***************************************	
41	13-0233	US 70-74A (Tunnel Road) at White Pine Drive	6.187	41.0																								
42	13-0234	US 70 (Tunnel Road) at Beverly Road	6.196	42.0																							***************************************	
43	13-0235	US 70 (Tunnel Road) at SR 2006 (Maple Springs Road) / Governors View Road	6.198	43.0																								
44	13-0237	NC 81 (Swannanoa River Road) at Glendale Avenue	6.182	44.0																								
45	13-0240	US 25 (Hendersonville Road) at Hotel Entrance/Arby's	6.045	46.0																							***************************************	
46	13-0241	US 25 (Hendersonville Road) at Vanderbilt Road / All Souls Crescent	6.046	47.0	Υ																						***************************************	
47	13-0242	NC 81 (Hendersonville Road) at US 25A (Lodge Steet)	6.046	48.0	Υ		2		1		600																	
48	13-0243	SR 3214 (Biltmore Avenue) at NC 81/SR 3556 (Meadow Road) / Bryson Street	6.047	49.0																							***************************************	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NA

Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County

PLAN DATE: December 2016 REVIEWED BY: M B Toth

Asheville Signal System

025892 Asheville 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

CADD Filename: SIG 1.00J.dgn

U-4715B SIG.1.00K

## SUMMARY OF WORK BY INTERSECTION

		Reference Information															Controller,Cabinet & Foundation Work						
						1	070 troller	Type 170 Cabinet									Install New Controller & Cabinet						
											8	es es					Install New Foundation		(sə				
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Routing Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	New	Existing	New Existing	New Aux File for Cabinet		CO with A willow City	with Auxiliary	: :	Adjacent to Existing In Same Place as Existing	Relocated to (quadrant)	Kelocated to (quadrant)	Comment	Terminal Splice Box Modify Foundation Remove Existing Foundation	Rotate Front of Cabinet clockwise (degre	Base Extender Base Adapter	) Ground t	Replace concrete (SF) Replace Asphalt **	Replace Aspinant Replace Brick (SF)
49	13-0245	US 25 (McDowell Street) at Choctaw Street	6.282	50.0		1	***************************************	1	8	3	,	1								*			
50	13-0246	US 25 (McDowell Street) / Asheland Avenue at Southside Avenue / Phifer Street	6.282	51.0		1	***************************************	1	6	3	,	1		1						1			
51	13-0247	US 25 (Southside Avenue) at Short Coxe Avenue / Coxe Avenue	6.283	52.0		1		1	2	2											1 32		
52	13-0248	US 25 (Biltmore Avenue) at SR 3214 (Charlotte Street) / Southside Avenue	6.052	53.0		1	***************************************	1	7	7											1 31		
53	13-0249	US 25 (Biltmore Avenue) at Hilliard Avenue	6.175	54.0	Y	1	***************************************	1	6	S		1					336 on elevated foundation - to be replaced prior to U-4715B			*			
54	13-0250	US 25 (Biltmore Avenue) at Aston Street	6.053	55.0	Υ	1		1	C	)			1				Not bolted to foundation. Existing 336 base mounted						
55	13-0251	US 25 (Broadway) at Walnut Street	6.054	56.0	Y	1		1	3	3											1 18		
56	13-0252	US 25 (Broadway) at Woodfin Street	6.054	57.0	Y	1	***************************************	1	g	)		1								*			
57	13-0253	Woodfin Street at I-240 EB On Ramp / Market Street	6.054	58.0	Y	1	***************************************	1	6	3	,	1								*			
58	13-0255	US 70 (Charlotte Street) at I-240 EB/WB Ramp	6.287	59.0		1		1	7	,	,	1					Upgraded signal 2016			*			
59	13-0263	US 19-23 74A (Patton Avenue) at SR 3548 (Clingman Avenue)	6.276	60.0		1		1	10	0	,	1								*			
60	13-0264	US 70-74A (College Street) at NC 694 (Town Mountain Road) / Martin Luther King Jr. Drive	6.291	61.0		1		1	3	3											1 21		
61	13-0267	US 25 (Broadway Street) at College Street	6.053	62.0	Y	1		1	2	2			1				336 on base extender			*			
62	13-0271	US 25 (Biltmore Avenue) at North Pack Square	6.053	63.0	Υ	1		1	2	2			1				336 on base extender on Sidewalk			*			
63	13-0276	US 19-23 74A (Patton Avenue) at Deaverview Road	6.155	64.0		1		1	5	)		1								1			
64	13-0277	SR 1781 (Broadway) at Chestnut Street / Mt. Clare Avenue	6.063	65.0		1		1	7	,		1								*			
65	13-0278	US 19-23 SB Ramps / I-26 EB Ramps at NC 251 (Riverside Drive)	6.068	66.0		1		1	4	<b>.</b>											1		
66	13-0279	US 70 (Tunnel Road) at Oteen Church Road	6.200	67.0		1		1	7	7	,	1								*			
67	13-0280	SR 1674 (Elkwood Avenue at SR 1684 (Elk Mountain Road)	6.072	68.0		1	***************************************	1	C	)											1 31		
68	13-0282	US 19-23 (Smokey Park Highway) at NC 112 (Sand Hill Road) / Asbury Road	6.233	69.0		1		1	7	7		1								1			
69	13-0284	US 25 (Hendersonville Road) at NC 146 (Long Shoals Road)	6.109	70.0		1		1	1	1	,	1								*			
70	13-0285	US 25 (Hendersonville Road) at NC 280 (Airport Road) / US25A (Sweeten Creek Road)	6.018	71.0		1		1	1.	2	,	1											
71	13-0286	US 25A (Sweeten Creek Road) at SR 3116 (Mills Gap Road)	6.268	72.0		1	-	1	g	)	,	1								*			
72	13-0288	NC 81 (Swannanoa River Road) at US 74A (Fairview Road)	6.219	73.0	Y	1		1	5	5		1								1			
								, ,		-									*	Reuse Ex	(isting		

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

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(919) 876-6888 NCBEES #F-0326

Asheville Signal System

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NA

Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County Asheville
PLAN DATE: December 2016 REVIEWED BY: M B Toth

Transportation

PLAN DATE: December 2016

REVIEWED BY: M B Toth

PREPARED BY: J A Wiles

REVIEWED BY: M B Toth

REVIEWED BY: DATE

DocuSigned by:

Melissa B. Toth

DATE

CADD Filename: SIG 1.00K.dgn

025892

|SIG.1.00| U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information						*Conduit and Ri	ser Worl	k						Power	r Service			
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	Drill / Core Drill for 1" for New Power Service Drill / Core Drill for 2" for FO or CAT5/24VAC Reuse Ex. 1" (pole) or 2" (base) ST Dedicated Riser for Comm (Retrofit Kit)	2" (or 3") Dedicated Conduit Entrar m re Conduit for UG Comm sr (HST) for Comm	New 1-1/4" Riser (HST) for Comm to pole mtd cabinet New UG Conduit for Comm Entrance New Cabinet Entrance in New Foundation for Comm	New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	1" Risers (WH) for Sig- New E	New 2" Risers (WH) for Sig- New Foundation Location	rstem Detector g (replace existing)	New UG conduit to new foundation location for Sig New 2" short Risers for Sig (from terminal splice box or from UG)	Modify Existing Power Service - Install New Service Wires in Existing Conduit Modify Existing Power Service - Install New Service	Wires in New Conduit Power Company to Provide Meter	Modify Existing Disconnect for New CCTV Power Service #	Install Service Disconnect by Signal Cabinet Remove Backup Generator Equipment	ckup Generato	Install 5/8" x 10' Grounding Electrode	Install New Electrical Service
49	13-0245	US 25 (McDowell Street) at Choctaw Street	6.282	50.0		1	1										•	***************************************		
50	13-0246	US 25 (McDowell Street) / Asheland Avenue at Southside Avenue / Phifer Street	6.282	51.0			1	1										***************************************		
51	13-0247	US 25 (Southside Avenue) at Short Coxe Avenue / Coxe Avenue	6.283	52.0				1										***************************************		
52	13-0248	US 25 (Biltmore Avenue) at SR 3214 (Charlotte Street) / Southside Avenue	6.052	53.0				1												
53	13-0249	US 25 (Biltmore Avenue) at Hilliard Avenue	6.175	54.0	Υ		1											***************************************		
54	13-0250	US 25 (Biltmore Avenue) at Aston Street	6.053	55.0	Υ													***************************************		
55	13-0251	US 25 (Broadway) at Walnut Street	6.054	56.0	Υ															
56	13-0252	US 25 (Broadway) at Woodfin Street	6.054	57.0	Υ		1													
57	13-0253	Woodfin Street at I-240 EB On Ramp / Market Street	6.054	58.0	Υ		1											***************************************		
58	13-0255	US 70 (Charlotte Street) at I-240 EB/WB Ramp	6.287	59.0			1					2								
59	13-0263	US 19-23 74A (Patton Avenue) at SR 3548 (Clingman Avenue)	6.276	60.0			1													
60	13-0264	US 70-74A (College Street) at NC 694 (Town Mountain Road) / Martin Luther King Jr. Drive	6.291	61.0				1												
61	13-0267	US 25 (Broadway Street) at College Street	6.053	62.0	Υ													***************************************		
62	13-0271	US 25 (Biltmore Avenue) at North Pack Square	6.053	63.0	Υ													***************************************		,
63	13-0276	US 19-23 74A (Patton Avenue) at Deaverview Road	6.155	64.0		1														
64	13-0277	SR 1781 (Broadway) at Chestnut Street / Mt. Clare Avenue	6.063	65.0				1												
65	13-0278	US 19-23 SB Ramps / I-26 EB Ramps at NC 251 (Riverside Drive)	6.068	66.0				1										000000000000000000000000000000000000000		
66	13-0279	US 70 (Tunnel Road) at Oteen Church Road	6.200	67.0				1							1					
67	13-0280	SR 1674 (Elkwood Avenue at SR 1684 (Elk Mountain Road)	6.072	68.0				1												
68	13-0282	US 19-23 (Smokey Park Highway) at NC 112 (Sand Hill Road) / Asbury Road	6.233	69.0				1				2					***************************************	***************************************		
69	13-0284	US 25 (Hendersonville Road) at NC 146 (Long Shoals Road)	6.109	70.0			1										***************************************	***************************************		
70	13-0285	US 25 (Hendersonville Road) at NC 280 (Airport Road) / US25A (Sweeten Creek Road)	6.018	71.0				1									**************************************	700000000000000000000000000000000000000		
71	13-0286	US 25A (Sweeten Creek Road) at SR 3116 (Mills Gap Road)	6.268	72.0		1		1				3								
72	13-0288	NC 81 (Swannanoa River Road) at US 74A (Fairview Road)	6.219	73.0	Υ	1									1		***************************************	***************************************		

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

Transportation

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INIT. DATE

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS NA

CADD Filename: SIG 1.00L.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

|SIG.1.00N U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information															Signal Items										
I I	ICDOT / CITY SIGNAL INV. NO.	INTERSECTION NAME	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole Standard Down Guy Assembly	Iype I Post With Foundation	I ype ii redesial will i roulldalloll	Junction Box Microwave Vehicle Detection System - Multiple Zones	APS Detector Station	Detector Station		Thermopolastic Pavement Marking Lines (8", 120 MIS)		Thermoplastic White Crosswalk Line 24", 120 MILS	Remove Line 24"
49	13-0245	US 25 (McDowell Street) at Choctaw Street	6.282	50.0																					00000000000		
50		US 25 (McDowell Street) / Asheland Avenue at Southside Avenue / Phifer Street	6.282	51.0			2	<u>.</u>	2		800														Monoton	***************************************	
51		US 25 (Southside Avenue) at Short Coxe Avenue / Coxe Avenue	6.283	52.0																					0000000		
52		US 25 (Biltmore Avenue) at SR 3214 (Charlotte Street) / Southside Avenue	6.052	53.0			2		2		800																
53		US 25 (Biltmore Avenue) at Hilliard Avenue	6.175	54.0	Y			<u> </u>			Ď			80	500					2		5(			MANAGEMENT AND		
54		US 25 (Biltmore Avenue) at Aston Street	6.053	55.0	Y													_							***************************************		
55		US 25 (Broadway) at Walnut Street	6.054	56.0	Y	8		<u></u>			1600				1200			8		2	8	1			***************************************		······································
56		US 25 (Broadway) at Woodfin Street	6.054	57.0	Y		1	<u></u>			200		1												**************************************		
57		Woodfin Street at I-240 EB On Ramp / Market Street	6.054	58.0	Y								_										•		00000000000000000000000000000000000000		
58		US 70 (Charlotte Street) at I-240 EB/WB Ramp	6.287	59.0			1		1		1400		2	120	2400					1 1					**************************************		
59		US 19-23 74A (Patton Avenue) at SR 3548 (Clingman Avenue)	6.276	60.0			2		2		600																
60		US 70-74A (College Street) at NC 694 (Town Mountain Road) / Martin Luther King Jr. Drive	6.291	61.0					.i.																**************************************		
61		US 25 (Broadway Street) at College Street	6.053	62.0	Υ	8	1		1		1600				1600			8			8	1			**************************************		
62	13-0271	US 25 (Biltmore Avenue) at North Pack Square	6.053	63.0	Y	10					2000							4			10	1			**************************************		<u> </u>
63	13-0276	US 19-23 74A (Patton Avenue) at Deaverview Road	6.155	64.0																							
64	13-0277	SR 1781 (Broadway) at Chestnut Street / Mt. Clare Avenue	6.063	65.0											500										***************************************		
65	13-0278	US 19-23 SB Ramps / I-26 EB Ramps at NC 251 (Riverside Drive)	6.068	66.0																					**************************************		
66	13-0279	US 70 (Tunnel Road) at Oteen Church Road	6.2	67.0			2		1		600														**************************************		i
67	13-0280	SR 1674 (Elkwood Avenue at SR 1684 (Elk Mountain Road)	6.072	68.0																					***************************************		<u></u>
68	13-0282	US 19-23 (Smokey Park Highway) at NC 112 (Sand Hill Road) / Asbury Road	6.233	69.0										30	420					1		15	0		**************************************		<u>.</u>
69	13-0284	US 25 (Hendersonville Road) at NC 146 (Long Shoals Road)	6.109	70.0																					***************************************		<u>;</u>
70	13-0285	US 25 (Hendersonville Road) at NC 280 (Airport Road) / US25A (Sweeten Creek Road)	6.018	71.0																					MANAGEMENT.		
71	13-0286	US 25A (Sweeten Creek Road) at SR 3116 (Mills Gap Road)	6.268	72.0										76	410					2		5(			Monthson	***************************************	; ;
72	13-0288	NC 81 (Swannanoa River Road) at US 74A (Fairview Road)	6.219	73.0	Υ		1		1		400														***************************************	***************************************	:

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

REVIEWED BY: REVISIONS INIT. DATE 025892

CADD Filename: SIG 1.00M.dgn

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles NA

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

|SIG.1.00| U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information													Controller, Cabinet & Foundation Work									
					20° Cont		pe 170 abinet							Install New Controller & Cabinet									
							***************************************			ø				Install New Foundation		Ĭ		es)					
		Cable Routing Sheet Number	Signal Design Sheet Number	cally significar at bottom of p				for Cabinet etector Cards		liary File Bas		isting as Existing	quadrant)	Comment	e Box	ation	ng Foundation	f Cabinet clockwise (degre			ound to Bottom (inches)	ete (SF)	alt ** 
NCDOT / City Signal Inv. No				In / near histori (see box note	New	Existing New	Existing	New Aux File f	332	332 with Auxili	336	Adjacent to Exi	Relocated to (		Terminal Splice	Modify Founda	Remove Existi	正	Base Extende	Base Adapter	Ex. Height - Gr	Replace concr	Replace Asphalt **
73 13-0291	US 25 (Hendersonville Road) at I-40 EB Exit Ramp	6.044	74.0		1	1	***************************************	4			***************************************									1	1 41		
74 13-0293	US 19-23 74A (Patton Avenue) at Florida Avenue	6.160	75.0		1	1	***************************************	8		1									*				
75 13-0366	US 70 (Tunnel Road) at SR 2002 (Riceville Road) / Ingles	6.199	76.0		1	1	***************************************	9		1									*				
76 13-0380	SR 3214 (Biltmore Avenue) at Short Coxe Avenue	6.052	77.0		1	1		4												1	1 30		***************************************
77 13-0381	SR 3214 (Biltmore Avenue) at Hospital Drive	6.050	78.0		1	1		9		1									*				
78 13-0383	SR 3214 (Biltmore Avenue) at Doctors Drive / Unadilla Avenue	6.049	79.0		1	1	***************************************	3		1									*				
79 13-0384	SR 1332 (N. Louisiana Avenue) at SR 1338 (Emma Road)	6.294	80.0		1	1		4		1									*				
80 13-0389	US 25 (McDowell Street) at US 25A (Lodge Street)	6.046	81.0	Y	1	1		9		1				Cabinet to have special coating - see PSPs					*				
81 13-0390	NC 251 (Riverside Drive) at SR 1674 (Old Burnsville Hill Road)	6.070	82.0		1	1	***************************************	3		1	***************************************			Spare conduit entrance					*				
82 13-0394	SR 3214 (Biltmore Avenue) at Choctaw Street / Florence Street	6.051	83.0		1	1		8		1				Spare conduit entrance					*				
83 13-0396	SR 3556 (Amboy Road) at SR 3556 (Meadow Road / Lyman Street)	6.335	84.0		1	1		4						Pole mounted cabinet on metal pole						1	1 35		
84 13-0398	US 74A (S Tunnel Road) at Asheville Mall / Movie Theater	6.186	85.0		1	1		11		1									*				
85 13-0400	Hilliard Avenue at SR 3548 (Clingman Avenue)	6.173	86.0	Υ	1	1		3		1		1		Existing 336 cabinet on raised foundation			1	0	1				
86 13-0401	US 70 (College Street) at SR 3284 (Charlotte Street)	6.286	87.0		1	1		14		1									*				
87 13-0404	US 19-23 Bus (Haywood Road) at SR 3412 (Sand Hill Road / Vermont Avenue)	6.164	0.88	Υ	1	1		6		1									*				
88 13-0412	US 74A (S Tunnel Road) at NC 81 (Swannanoa River Road)	6.184	89.0		1	1		11		1									*				
89 13-0416	US 74A (Charlotte Highway) at SR 2132 (Rose Hill Road) / Cedarwood Drive	6.227	90.0		1	1	***************************************	7		1									*	-1			
90 13-0417	US 74A (S Tunnel Road) at Whole Foods Market	6.186	91.0		1	1		9		1									*				
91 13-0421	US 70 (Tunnel Road) at SR 2403 (Lower Grassy Branch Road)	6.203	92.0		1	1		4		1									*				
92 13-0430	US 25 (Hendersonville Road) at Gold's Gym / Publix	6.030	93.0		1	1		6												1	1 36		
93 13-0432	US 19-23 (Smokey Park Highway) at SR 1245 (Acton Circle)	6.144	94.0		1	1		5		1									1				
94 13-0435	US 70-74A (Tunnel Road) at I-240 EB Exit Ramp / I-240 WB On Ramp	6.189	95.0		1	1		10		1								•	*				
95 13-0437	US 25 (Merrimon Avenue) at Larchmont Road	6.061	96.0		1	1		6		1									1				
96 13-0439	US 25 (Hendersonville Road) at SR 3551 (Heywood Road) / Royal Pines Drive	6.022	97.0		1	1		4		1	***************************************						•		*				

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

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NA

Transportation

Asheville Signal System Summary of Work by

REVISIONS

Intersection (sheet 1 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

INIT. DATE

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CADD Filename: SIG 1.00N.dgn

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information									*Co	onduit and	d Riser V	Vork									Pow	er Ser	vice		
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	Drill for 1" for New Power Se	Drill / Core Drill for 2" for FO or CAT5/24VAC Reuse Ex. 1" (pole) or 2" (base) ST Dedicated	i (pole) of 2 (base) ST Dedicate imm (Retrofit Kit)	Reuse Ex. 2" (or 3") Dedicated Conduit Entrance for UG Comm	Use 2" Spare Conduit for UG Comm New 2" Riser (HST) for Comm	New 1-1/4" Riser (HST) for Comm to pole mtd cabine	New UG Conduit for Comm Entrance New Cabinet Entrance in New Foundation	for Comm New 1/2" Risers (WH) for Sig- Pedestrian	suc	New 1" Risers (WH) for Sig- New Electrical Service New 2" Risers (WH) for Sig- New Foundation		ers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing) New UG conduit to new foundation location for Sig	ort Risers for Sig (from terminal splic UG)	Modify Existing Power Service - Install New Service	Wires in Existing Conduit  Modify Existing Power Service - Install New Service	Wires in New Conduit	sting Disconnect	Service # Install Service Disconnect by Signal Cabinet	Remove Backup Generator Equipment Install Backup Generator connection	Install 5/8" x 10' Grounding Electrode	Install New Electrical Service
73	13-0291	US 25 (Hendersonville Road) at I-40 EB Exit Ramp	6.044	74.0						1												1	1	***************************************			
74		US 19-23 74A (Patton Avenue) at Florida Avenue	6.160	75.0				1																***************************************			
75	13-0366	US 70 (Tunnel Road) at SR 2002 (Riceville Road) / Ingles	6.199	76.0					•	1														***************************************			
76	,	SR 3214 (Biltmore Avenue) at Short Coxe Avenue	6.052	77.0							1	1												***************************************			
77 78		SR 3214 (Biltmore Avenue) at Hospital Drive	6.050	78.0				1				1															
79	,	SR 3214 (Biltmore Avenue) at Doctors Drive / Unadilla Avenue SR 1332 (N. Louisiana Avenue) at SR 1338 (Emma Road)	6.049	79.0 80.0			1	I				1												***************************************			
80	,	US 25 (McDowell Street) at US 25A (Lodge Street)	6.046	81.0	Υ		<u>'</u>			1		<u>'</u>												***************************************			
81		NC 251 (Riverside Drive) at SR 1674 (Old Burnsville Hill Road)	6.070	82.0								1					3										
82		SR 3214 (Biltmore Avenue) at Choctaw Street / Florence Street	6.051	83.0						1														***************************************			
83	,	SR 3556 (Amboy Road) at SR 3556 (Meadow Road / Lyman Street)	6.335	84.0																				***************************************			
84	,	US 74A (S Tunnel Road) at Asheville Mall / Movie Theater	6.186	85.0				1																			
85	13-0400	Hilliard Avenue at SR 3548 (Clingman Avenue)	6.173	86.0	Υ					1		1			1		2		3								
86	13-0401	US 70 (College Street) at SR 3284 (Charlotte Street)	6.286	87.0			1					1												***************************************			
87	13-0404	US 19-23 Bus (Haywood Road) at SR 3412 (Sand Hill Road / Vermont Avenue)	6.164	88.0	Υ			***************************************		1			***************************************			and decrease and d								000000000000000000000000000000000000000			
88	13-0412	US 74A (S Tunnel Road) at NC 81 (Swannanoa River Road)	6.184	89.0	<u></u>			1																***************************************		***************************************	
89	13-0416	US 74A (Charlotte Highway) at SR 2132 (Rose Hill Road) / Cedarwood Drive	6.227	90.0						1																	
90	13-0417	US 74A (S Tunnel Road) at Whole Foods Market	6.186	91.0				1																***************************************			
91	13-0421	US 70 (Tunnel Road) at SR 2403 (Lower Grassy Branch Road)	6.203	92.0			1					1															
92	13-0430	US 25 (Hendersonville Road) at Gold's Gym / Publix	6.030	93.0							1							1									
93	13-0432	US 19-23 (Smokey Park Highway) at SR 1245 (Acton Circle)	6.144	94.0					1															***************************************			
94	13-0435	US 70-74A (Tunnel Road) at I-240 EB Exit Ramp / I-240 WB On Ramp	6.189	95.0				***************************************	1				***************************************			***************************************								***************************************			
95	13-0437	US 25 (Merrimon Avenue) at Larchmont Road	6.061	96.0				1																			
96	13-0439	US 25 (Hendersonville Road) at SR 3551 (Heywood Road) / Royal Pines Drive	6.022	97.0				***************************************		1			***************************************	***************************************		***************************************								***************************************	***************************************	***************************************	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NA

Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE 025892

CADD Filename: SIG 1.000.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

|SIG.1.00| U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information															Signa	al Items									
	NCDOT / CITY SIGNAL INV. NO. INTERSECTION NAME	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	Standard Down Guy Assembly	Type I Post with Foundation	Type II Pedestal with Foundation	ion Box	Microwave Venicle Detection System - Multiple Zones APS Detector Station Central Control Unit for APS	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
73	13-0291 US 25 (Hendersonville Road) at I-40 EB Exit Ramp	6.044	74.0																							
74	13-0293 US 19-23 74A (Patton Avenue) at Florida Avenue	6.16	75.0							300															***************************************	
75	13-0366 US 70 (Tunnel Road) at SR 2002 (Riceville Road) / Ingles	6.199	76.0			1		1		200												•			***************************************	
76	13-0380 SR 3214 (Biltmore Avenue) at Short Coxe Avenue	6.052	77.0																							
77	13-0381 SR 3214 (Biltmore Avenue) at Hospital Drive	6.05	78.0																							
78	13-0383 SR 3214 (Biltmore Avenue) at Doctors Drive / Unadilla Avenue	6.049	79.0										75	600						2						
79	13-0384 SR 1332 (N. Louisiana Avenue) at SR 1338 (Emma Road)	6.294	80.0																						***************************************	
80	13-0389 US 25 (McDowell Street) at US 25A (Lodge Street)	6.046	81.0	Y		1		2		1000																
81	13-0390 NC 251 (Riverside Drive) at SR 1674 (Old Burnsville Hill Road)	6.07	82.0										60	600						5		300				
82	13-0394 SR 3214 (Biltmore Avenue) at Choctaw Street / Florence Street	6.051	83.0			2		2		600															***************************************	
83	13-0396 SR 3556 (Amboy Road) at SR 3556 (Meadow Road / Lyman Street)	6.335	84.0			1		1		400			40	400						1		250				
84	13-0398 US 74A (S Tunnel Road) at Asheville Mall / Movie Theater	6.186	85.0			1		1		400				500												
85	13-0400 Hilliard Avenue at SR 3548 (Clingman Avenue)	6.173	86.0	Υ									40	400						2		120				
86	13-0401 US 70 (College Street) at SR 3284 (Charlotte Street)	6.286	87.0																							
87	13-0404 US 19-23 Bus (Haywood Road) at SR 3412 (Sand Hill Road / Vermont Avenue)	6.164	88.0	Υ		1		1		200																
88	13-0412 US 74A (S Tunnel Road) at NC 81 (Swannanoa River Road)	6.184	89.0																							
89	13-0416 US 74A (Charlotte Highway) at SR 2132 (Rose Hill Road) / Cedarwood Drive	6.227	90.0																						***************************************	
90	13-0417 US 74A (S Tunnel Road) at Whole Foods Market	6.186	91.0																							
91	13-0421 US 70 (Tunnel Road) at SR 2403 (Lower Grassy Branch Road)	6.203	92.0																							
92	13-0430 US 25 (Hendersonville Road) at Gold's Gym / Publix	6.03	93.0			2		2		240															***************************************	
93	13-0432 US 19-23 (Smokey Park Highway) at SR 1245 (Acton Circle)	6.144	94.0			1		1		200															***************************************	
94	13-0435 US 70-74A (Tunnel Road) at I-240 EB Exit Ramp / I-240 WB On Ramp	6.189	95.0			1				100															***************************************	
95	13-0437 US 25 (Merrimon Avenue) at Larchmont Road	6.061	96.0																							
96	13-0439 US 25 (Hendersonville Road) at SR 3551 (Heywood Road) / Royal Pines Drive	6.022	97.0											500											***************************************	***************************************

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



750 Greenfield Parkway, Garner, NC

NA

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M. B. Toth

	PLAN DATE: DECEMBET 2010	LEATEMED DI. MA	ו ס וטנו	I
27529	PREPARED BY: J A Wiles	REVIEWED BY:		
	REVISIONS		INIT.	DATE

-CADD Filename: SIG 1.00P.dgn

025892

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

## SUMMARY OF WORK BY INTERSECTION

		Reference Information													Controller,Cabinet & Foundation Work							
						207 Contro		e 170 abinet							Install New Controller & Cabinet							
											es				Install New Foundation		***************************************	(se)	***************************************			
	NCDOT / City		Cable Rou <b>l</b> ing Sheet Number	Signal Design Sheet Number	near historically significan e box note at bottom of pa	W	sting	sting	w Aux File for Cabinet of New Detector Cards		with Auxiliary File Bas		acent to Existing	ocated to (quadrant)	Comment	al Spl	dify Foundation move Existing Foundation	Front of Cabine	se Extender se Adapter	le (336S) Height - Ground to Bottom (inches)	place concrete (SF)	place Brick (SF)
	Signal Inv. No.	Intersection Name	0.040		ln /	9			2 2	33	332	336	Ad	Re		Te	Re Re	8	<u>ea</u> <u>ea</u>	<b>&amp;</b> M	<u>&amp; &amp;</u>	<u> </u>
97	13-0441 Fairview Road at I-240 WB R		6.218	98.0		1	1		7		1		***************************************			***************************************			1	***************************************		
98	13-0443 US 25 (Hendersonville Road)		6.040	99.0	Y	1 4	1		9		1		***************************************			***************************************						
99	13-0444 NC 146 (Long Shoals Road)		6.107	100.0		1 1	1		0		1		•••••••••••••••••••••••••••••••••••••••						*			
100	13-0449 US 25 (Merrimon Avenue) at		6.055 6.055	101.0		1 1			0		1		***************************************			***************************************			*			
102	13-0450   SK 1781 (Bloadway) N. Lexii 13-0451   US 19-23 (Smokey Park High	ngton Avenue at I-240 WB Entrance Ramp	6.146	103.0		1 1	1		6		1		***************************************						*			
103	13-0453 US 74A (Charlotte Highway) a		6.228	104.0		1 1			6	······	1		•••••••••••••••••••••••••••••••••••••••						*			
104		31 (Swannanoa River Road) / Knauth Road	6.199	105.0		1 1			6		1		***************************************			***************************************			*	000000000000000000000000000000000000000		
105	13-0457 NC 191 (Brevard Road) at NC		6.121	106.0		1	1		8		1		***************************************						*	***************************************		
106	13-0459 US 70 (Tunnel Road) at US 7		6.187	107.0		1	1		6		1		***************************************						1			
107		Memorial Mission Hospital / Anna Woodfin Drive	6.296	108.0		1	1		4		1		***************************************		Oversize junction box may have to be in sidewalk	***************************************	***************************************		1	000000000000000000000000000000000000000	20	
108	13-0462 SR 3214 (Biltmore Avenue) a	·	6.049	109.0		1	1		6		1								*			
109	13-0464 US 19-23 (Smokey Park High	nway) at NC 151 (Dogwood Road / Pisgah Highway)	6.136	110.0		1	1		7	•••••••••••••••••••••••••••••••••••••••	1				New 332 design done by NCDOT - Division Project - inventoried as pole	)			*			
110	13-0465   I-240 EB Ramps / Home Dep	oot at SR 3238 (Fairview Road)	6.216	111.0		1	1		10		1				mounied				1			
111		R 3414 (E. Oakview Road) / Farmers Market	6.129	112.0		1	1		8		1		***************************************			***************************************			*			
112	13-0468 US 19-23 74A (Smokey Park	· Highway) at I-40 WB Ramps	6.146	113.0		1	1		6		1		***************************************		Use 2" spare conduit entrance for CAT5E & 24 VAC				*			
113	13-0498 US 19-23 74A (Smokey Park	(Highway) at SR 1404 (Old Haywood Road)	6.147	114.0		1	1		7		1		***************************************						*			
114	13-0505 NC 63 (Leicester Highway) at	t SR 1822 (Mount Carmel Road) / Fallen Spruce Drive	6.246	115.0		1	1		6		1		***************************************			***************************************			*			
115	13-0508 US 25 (Hendersonville Road)	) at Turtle Creek Drive / Weirbridge Drive	6.030	116.0		1	1		8		1		***************************************						*			
116	13-0512 US 25 (Hendersonville Road)	) at Lambeth Drive / Walmart	6.032	117.0		1	1		9		1		***************************************			***************************************	***************************************		*	9		
117	13-0514 NC 191 (Brevard Road) at I-2	26 EB Ramps	6.123	118.0		1	1		8		1		***************************************			•	•	•	*			
118	13-0522 Fairview Road at Oakley Plaz	ra	6.218	119.0		1	1		7		1								*			
119	13-0525 SR 1781 (Broadway) at W.T.	Weaver Boulevard	6.066	120.0		1	1		5		1		***************************************			***************************************			*			
120	13-0528 US 25 (Hendersonville Road)	) at Biltmore Parkway Centre / Carolina Day School	6.034	121.0		1	1	***************************************	8		1		***************************************	***************************************		***************************************	***************************************		*	***************************************		

"Reuse Existing

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NA

Asheville Signal System Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth

Asheville 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

025892

-CADD Filename: SIG 1.00Q.dgn

REVISIONS INIT. DATE Melissa B. Toth 

## SUMMARY OF WORK BY INTERSECTION

		Reference Information								*Conc	uit and F	Riser Wor	k							Power 9	Service			
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	1" for Nev	1" (pole) or 2" (base) ST Domm (Retrofit Kit)	x. 2" (or 3") Dec omm	Use 2" Spare Conduit for UG Comm New 2" Riser (HST) for Comm	New 1-1/4" Riser (HST) for Comm to pole mtd cabinet	t Entrance in New Fou	New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	Risers (WH) for System Detector	New Z" Risers (WH) for Sig (replace existing) New UG conduit to new foundation location for Sig	for Sig (from terminal splic	Modify Existing Power Service - Install New Service Wires in Existing Conduit	Company to Provide Meter	or New CCT	Install Service Disconnect by Signal Cabinet Remove Backup Generator Equipment	Install Backup Generator connection	Install 5/8" x 10' Grounding Electrode	Install New Electrical Service
97	13-0441	Fairview Road at I-240 WB Ramps / River Ridge Drive	6.218	98.0		1		***************************************												***************************************	***************************************	***************************************		
98		US 25 (Hendersonville Road) at Busbee Road	6.040	99.0	Υ											2				***************************************	***************************************	***************************************		
99		NC 146 (Long Shoals Road) at SR 3503 (Overlook Road)	6.107	100.0				1																
100		US 25 (Merrimon Avenue) at I-240 WB Exit Ramp	6.055	101.0			1				ı							·····						
101 102		SR 1781 (Broadway) N. Lexington Avenue at I-240 WB Entrance Ramp	6.055	102.0 103.0				1														***************************************		
102		US 19-23 (Smokey Park Highway) at I-40 EB Ramps / Acton Circle US 74A (Charlotte Highway) at Reynolds MS / Rocket Drive	6.146 6.228	103.0				-	1											***************************************	***************************************	***************************************		<i></i>
103		US 70 (Tunnel Road) at NC 81 (Swannanoa River Road) / Knauth Road	6.199	104.0					1							1								
105		NC 191 (Brevard Road) at NC 112 (Sardis Road)	6.121	106.0				1	<u>'</u>							•				***************************************	***************************************	***************************************		
106		US 70 (Tunnel Road) at US 74A (S Tunnel Road)	6.187	107.0			1	***************************************											1		***************************************	***************************************		
107		US 25 (McDowell Street) at Memorial Mission Hospital / Anna Woodfin Drive	6.296	108.0																				
108	13-0462	SR 3214 (Biltmore Avenue) at Granby Street / Rose Chapman Drive	6.049	109.0				••••	1															
109	13-0464	US 19-23 (Smokey Park Highway) at NC 151 (Dogwood Road / Pisgah Highway)	6.136	110.0				***************************************	1						2						***************************************	***************************************		
110	13-0465	I-240 EB Ramps / Home Depot at SR 3238 (Fairview Road)	6.216	111.0			1	***************************************												***************************************	***************************************			1
111	13-0466	NC 191 (Brevard Road) at SR 3414 (E. Oakview Road) / Farmers Market	6.129	112.0				1												***************************************	***************************************	***************************************		,
112	13-0468	US 19-23 74A (Smokey Park Highway) at I-40 WB Ramps	6.146	113.0				1																
113	13-0498	US 19-23 74A (Smokey Park Highway) at SR 1404 (Old Haywood Road)	6.147	114.0				1																
114	13-0505	NC 63 (Leicester Highway) at SR 1822 (Mount Carmel Road) / Fallen Spruce Drive	6.246	115.0		1				,						1				***************************************	***************************************	***************************************		
115	13-0508	US 25 (Hendersonville Road) at Turtle Creek Drive / Weirbridge Drive	6.030	116.0					1															
116	13-0512	US 25 (Hendersonville Road) at Lambeth Drive / Walmart	6.032	117.0			1																	
117	13-0514	NC 191 (Brevard Road) at I-26 EB Ramps	6.123	118.0				1												***************************************	***************************************			
118	13-0522	Fairview Road at Oakley Plaza	6.218	119.0			1	***************************************												***************************************	***************************************	***************************************		
119	13-0525	SR 1781 (Broadway) at W.T. Weaver Boulevard	6.066	120.0					1							1				***************************************	***************************************			
120	13-0528	US 25 (Hendersonville Road) at Biltmore Parkway Centre / Carolina Day School	6.034	121.0				***************************************	1			***************************************								***************************************	***************************************	***************************************		

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED Asheville Signal System



NA

Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

CADD Filename: SIG 1.00R.dgn

025892

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information															Signa	al Items										
	ICDOT / CITY SIGNAL INV. NO.	INTERSECTION NAME	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	Standard Down Guy Assembly	Type I Post with Foundation	Type II Pedestal with Foundation	Junction Box Microwave Vehicle Detection System - Multiple Zones	APS Detector Station	Central Control Unit for APS Detector Station	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
97	13-0441	Fairview Road at I-240 WB Ramps / River Ridge Drive	6.218	98.0																								
98	13-0443	US 25 (Hendersonville Road) at Busbee Road	6.04	99.0	Υ		2		1		90				950													
99	13-0444	NC 146 (Long Shoals Road) at SR 3503 (Overlook Road)	6.107	100.0			1		1		300				450													
100	13-0449	US 25 (Merrimon Avenue) at I-240 WB Exit Ramp	6.055	101.0																								
101	13-0450	SR 1781 (Broadway) N. Lexington Avenue at I-240 WB Entrance Ramp	6.055	102.0																								
102	13-0451	US 19-23 (Smokey Park Highway) at I-40 EB Ramps / Acton Circle	6.146	103.0			2		1		360																	
103	13-0453	US 74A (Charlotte Highway) at Reynolds MS / Rocket Drive	6.228	104.0																								
104	13-0455	US 70 (Tunnel Road) at NC 81 (Swannanoa River Road) / Knauth Road	6.199	105.0			2		2		600																	
105	13-0457	NC 191 (Brevard Road) at NC 112 (Sardis Road)	6.121	106.0											800													
106	13-0459	US 70 (Tunnel Road) at US 74A (S Tunnel Road)	6.187	107.0																								
107	13-0461	US 25 (McDowell Street) at Memorial Mission Hospital / Anna Woodfin Drive	6.296	108.0																								
108	13-0462	SR 3214 (Biltmore Avenue) at Granby Street / Rose Chapman Drive	6.049	109.0																								
109	13-0464	US 19-23 (Smokey Park Highway) at NC 151 (Dogwood Road / Pisgah Highway)	6.136	110.0										60	750						2			400			***************************************	
110	13-0465	I-240 EB Ramps / Home Depot at SR 3238 (Fairview Road)	6.216	111.0											600													
111	13-0466	NC 191 (Brevard Road) at SR 3414 (E. Oakview Road) / Farmers Market	6.129	112.0																								
112	13-0468	US 19-23 74A (Smokey Park Highway) at I-40 WB Ramps	6.146	113.0			1		1		630										•							
113	13-0498	US 19-23 74A (Smokey Park Highway) at SR 1404 (Old Haywood Road)	6.147	114.0																								
114	13-0505	NC 63 (Leicester Highway) at SR 1822 (Mount Carmel Road) / Fallen Spruce Drive	6.246	115.0			1		2		540																	
115	13-0508	US 25 (Hendersonville Road) at Turtle Creek Drive / Weirbridge Drive	6.03	116.0			1		2		400											•						
116	13-0512	US 25 (Hendersonville Road) at Lambeth Drive / Walmart	6.032	117.0										•								······································				•		
117	13-0514	NC 191 (Brevard Road) at I-26 EB Ramps	6.123	118.0			2		2		500				370													
118	13-0522	Fairview Road at Oakley Plaza	6.218	119.0													•					•						
119	13-0525	SR 1781 (Broadway) at W.T. Weaver Boulevard	6.066	120.0			2		1		600																	
120	13-0528	US 25 (Hendersonville Road) at Biltmore Parkway Centre / Carolina Day School	6.034	121.0		•											***************************************	······································				***************************************					•	

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REVISIONS

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NA

Asheville Signal System Summary of Work by

Intersection (sheet 3 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

025892 REVIEWED BY: INIT. DATE

CADD Filename: SIG 1.00S.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information												Controller,Cabinet & Foundation Work		
				-	2070 Controller	Type 170							Install New Controller & Cabinet		
					***************************************	***************************************			Base				Install New Foundation	egrees (s)	
		Cable Routing Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	New Existing	New	New Aux File for Cabinet	No. of New Detector Cards 332	332 with Auxiliary File	=	Adjacent to Existing In Same Place as Existing	Relocated to (quadrant)	Comment	Terminal Splice Box Modify Foundation Remove Existing Foundation Rotate Front of Cabinet clockwise (de Base Extender Base Adapter Pole (336S) Ex. Height - Ground to Bottom (inches	Replace Asphalt ** Replace Brick (SF)
121	13-0529 US 25 (Hendersonville Road) at SR 3506 (Springside Drive) / Herman Avenue	6.025	122.0		1	1		7						1 24	
122	13-0530 SR 3446 (Enka Lake Road) at NC 122 (Sand Hill Road)	6.234	123.0		1	1		6	1					*	
123	13-0553 US 25 (Weaverville Road) at US 19-23 New Bridge / N. Merrimon Avenue	6.076	124.0		1	1		6	1					*	
124	13-0554 US 74A (Charlotte Highway) at SR 3071 (Avondale Road)	6.224	125.0		1	1		5	1					*	
125	13-0555 NC 191 (Brevard Road) at NC 146 (Long Shoals Road) / Vista Boulevard	6.090	126.0		1	1		6	1					*	
126	13-0556 NC 63 (Leicester Highway) at SR 1004 (Newfound Road) /SR 1357 (Dix Creek Chapel Road)	6.241	127.0		1	1		6	1					*	
127	13-0559 Monte Vista Road at Acton Circle	6.315	128.0		1	1		6	1					*	
128	13-0561 SR 3530 (Watson Road) at US 25 (Hendersonville Road)	6.015	129.0		1	1		5	1					*	
129	13-0566 US 25A (Sweeten Creek Road) at SR 3185 (Rathfarnham Road)	6.265	130.0		1	1		4						1 22	
130	13-0576 SR 1368 (Lee's Creek Road) at SR 1367 (Erwin Hills Road)	6.259	131.0		1	1		6	1					*	
131	13-0581 US 25A (Sweeten Creek Road) at SR 3162 (Royal Pines Drive)	6.262	132.0		1	1		5	1				Risers go into side of base extender	*	
132	13-0584 US 25 (Hendersonville Road) at SR 3505 (Overlook Road)	6.030	133.0		1	1		9	1					*	
133	13-0602 US 25 (Hendersonville Road) at West Chapel Road	6.041	134.0	Υ	1	1		7	1					*	
134	13-0646 NC 191 (Brevard Road) at I-26 WB Ramps	6.123	135.0	Υ	1	1		6	1				To be removed under I-5504	*	
135	13-0647 NC 191 (Brevard Road) at Asheville Outlets	6.122	136.0		1	1		11	1					*	
136	13-0660 US 74A (S Tunnel Road) at Overlook Village / Lowes	6.185	137.0		1	1		10	1					*	
137	13-0663 NC 112 (Sardis Road) at SR 3412 (Sand Hill Road)	6.238	138.0		1	1		4	1					*	
138	13-0668 US 25A (Sweeten Creek Road) at I-40 WB Ramps	6.212	139.0		1	1		6	1				Base adapter	*	
139	13-0669 US 25A (Sweeten Creek Road) at I-40 EB Ramps	6.212	140.0		1	1		6	1				Base adapter	*	
140	13-0673 US 25A (Sweeten Creek Road) at Sweeten Creek Industrial Park Road	6.210	141.0		1	1		7	1				Base adapter	*	
141	13-0680 US 25A (Sweeten Creek Road) at Gerber Road	6.269	142.0		1	1		5	1				Ground rod in cabinet, no spares		
142	13-0707 US 70 (Tunnel Road) at SR 2000 (Arnold Road /Pleasant Ridge Drive)	6.201	143.0		1	1		6	1				Existing spare riser may go to spare conduit entrance - call for core d	ill *	
143	13-0710 NC 146 (Long Shoals Road) at Valley Springs Middle School	6.106	144.0		1	1		9	1					*	
144	13-0713 Amboy Road at State Street	6.304	145.0		1	1		5	1				No spare entrance	*	
•	<u> </u>					,	•				·			*Reuse Existing	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NA

Transportation

Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth

Asheville Signal System

025892 Asheville 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

CADD Filename: SIG 1.00T.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

|SIG.1.00 U-4715B

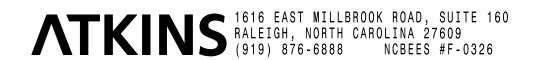
## SUMMARY OF WORK BY INTERSECTION

	Reference Information										*Cond	duit and R	iser Wor	k								Power	Service			
	CDOT / City gnal Inv. No.   Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	Drill / Core Drill for 1" for New Power Service	Drill / Core Drill for 2" for FO or CAT5/24VAC	Ex. 1" (pole) or 2" (base) ST or Comm (Retrofit Kit)	use Ex. 2" UG Comm	e 2" Spare Condi	New 2" Riser (HST) for Comm	w 1-1/4" Riser (HST) for (	New UG Conduit for Comm Entrance New Cabinet Entrance in New Foundation for Comm	New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	New 2" Risers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing)	w 2" short Risers for Sig (from terminal splic x or from UG)	lify Existin	Modify Existing Power Service - Install New Service Wires in New Conduit	Power Company to Provide Meter	Modify Existing Disconnect for New CCTV Power Service #	Install Service Disconnect by Signal Cabinet Remove Backup Generator Equipment	cup Generator	Install 5/8" x 10' Grounding Electrode Install New Electrical Service	III Stali IVEW EIGOUIOGI COLVIOC
121	13-0529 US 25 (Hendersonville Road) at SR 3506 (Springside Drive) / Herman Avenue	6.025	122.0									1	***************************************									***************************************				
122	13-0530 SR 3446 (Enka Lake Road) at NC 122 (Sand Hill Road)	6.234	123.0									1														
123	13-0553 US 25 (Weaverville Road) at US 19-23 New Bridge / N. Merrimon Avenue	6.076	124.0									1	***************************************													
124	13-0554 US 74A (Charlotte Highway) at SR 3071 (Avondale Road)	6.224	125.0			1					,	1	***************************************				1									
125	13-0555 NC 191 (Brevard Road) at NC 146 (Long Shoals Road) / Vista Boulevard	6.090	126.0						,	1						2										
126	13-0556 NC 63 (Leicester Highway) at SR 1004 (Newfound Road) /SR 1357 (Dix Creek Chapel Road)	6.241	127.0							1																
127	13-0559 Monte Vista Road at Acton Circle	6.315	128.0									1	***************************************													
128	13-0561 SR 3530 (Watson Road) at US 25 (Hendersonville Road)	6.015	129.0									1	***************************************													
129	13-0566 US 25A (Sweeten Creek Road) at SR 3185 (Rathfarnham Road)	6.265	130.0								1															
130	13-0576 SR 1368 (Lee's Creek Road) at SR 1367 (Erwin Hills Road)	6.259	131.0			1						1	***************************************				1									
131	13-0581 US 25A (Sweeten Creek Road) at SR 3162 (Royal Pines Drive)	6.262	132.0			1						1	***************************************	1			2			1						
132	13-0584 US 25 (Hendersonville Road) at SR 3505 (Overlook Road)	6.030	133.0				1																			
133	13-0602 US 25 (Hendersonville Road) at West Chapel Road	6.041	134.0	Υ			1										1									
134	13-0646 NC 191 (Brevard Road) at I-26 WB Ramps	6.123	135.0	Υ							Í	1	***************************************										***************************************			
135	13-0647 NC 191 (Brevard Road) at Asheville Outlets	6.122	136.0				1						***************************************													
136	13-0660 US 74A (S Tunnel Road) at Overlook Village / Lowes	6.185	137.0				1														1					
137	13-0663 NC 112 (Sardis Road) at SR 3412 (Sand Hill Road)	6.238	138.0								•	1	***************************************													
138	13-0668 US 25A (Sweeten Creek Road) at I-40 WB Ramps	6.212	139.0				1						***************************************													
139	13-0669 US 25A (Sweeten Creek Road) at I-40 EB Ramps	6.212	140.0				1						***************************************								1					
140	13-0673 US 25A (Sweeten Creek Road) at Sweeten Creek Industrial Park Road	6.210	141.0					1																		
141	13-0680 US 25A (Sweeten Creek Road) at Gerber Road	6.269	142.0			1						1	***************************************													
142	13-0707 US 70 (Tunnel Road) at SR 2000 (Arnold Road /Pleasant Ridge Drive)	6.201	143.0			1						1	***************************************				1									
143	13-0710 NC 146 (Long Shoals Road) at Valley Springs Middle School	6.106	144.0				1						***************************************													
144	13-0713 Amboy Road at State Street	6.304	145.0			1				1																

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REVISIONS

NA

Asheville Signal System Summary of Work by

Transportation

Intersection (sheet 2 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INIT. DATE

CADD Filename: SIG 1.00U.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

|SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information														Signal Ite	ms									
		Cable Layout S Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head		i Z-inch o-oection olgnal nead	Signal Cable  Messenger Cable (3,8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	Type I Post with Foundation	Type II Pedestal with Foundation	Junction Box	Microwave Vehicle Detection System - Multiple Zones APS Detector Station	Central Control Unit for APS Detector Station	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	nite Stop Bar 24", 120 MILS	I nermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
121	13-0529 US 25 (Hendersonville Road) at SR 3506 (Springside Drive) / Herman Avenue	6.025	122.0																						
122		6.234	123.0			1				00														·	
123		6.076	124.0			2				00															
124		6.224	125.0			1	,		20	00															
125	13-0555 NC 191 (Brevard Road) at NC 146 (Long Shoals Road) / Vista Boulevard	6.09	126.0									30	260					1			15			<u></u>	
126		6.241	127.0			1			1 52															<u></u>	
127		6.315	128.0			1				50															
128		6.015	129.0			1			30	00		00													
129		6.265	130.0									60						2						·	
130		6.259	131.0			2			60	00		440	000					4							
131		6.262	132.0									140	280					1		•					
132	13-0584 US 25 (Hendersonville Road) at SR 3505 (Overlook Road)	6.03	133.0						1				1050											<u>-</u>	
133		6.041	134.0	Υ		1			9	)5			900												
134		6.123	135.0	Υ																					
135		6.122	136.0										450												
136		6.185	137.0																					<u>.</u>	
137		6.238	138.0			1				70															
138		6.212	139.0			1				30		•	200												
139		6.212	140.0			1				50			210												
140	13-0673 US 25A (Sweeten Creek Road) at Sweeten Creek Industrial Park Road	6.21	141.0			1		2		00															
141		6.269	142.0			2	,			30															
142		6.201	143.0			3		2		000															
143		6.106	144.0			1			1 28	80			450												
144	13-0713 Amboy Road at State Street	6.304	145.0																						

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

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NA

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE 025892

CADD Filename: SIG 1.00V.dgn

|SIG.1.00W U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information												Controller, Cabinet & Foundation Work		
					2070 Controlle	Type 17							Install New Controller & Cabinet		
										<u> </u>			Install New Foundation	(Se	
	NCDOT / City Signal Inv. No. Intersection Name	Cable Routing Sheet Number	Signal Design Sheet Number	n / near historically significant area see box note at bottom of page)	lew Xistina	lew solitorio	xisting lew Aux File for Cabinet	lo. of New Detector Cards	332	332 with Auxiliary File Bas	Jacent to Existing	Same Place as selocated to (qua	Comment	erminal Splice Box lodify Foundation temove Existing Foundation ase Extender ase Adapter ole (336S)  X. Height - Ground to Bottom (inches)	eplace concrete (SF) eplace Asphalt ** eplace Brick (SF)
145	Signal Inv. No. Intersection Name  13-0729 NC 146 (Long Shoals Road) at SR 3501 (Clayton Road)	6.101	146.0	<u> </u>	2 W	1		5	<u>.</u>	1	<u> </u>	<u> </u>		* * * * * * * * * * * * * * * * * * *	
146	13-0731 NC 191 (Brevard Road) at SR 3431 (Pond Road)	6.128	147.0		1	1		5		1				*	
147	13-0741 US 25 (Hendersonville Road) at Vanderbilt Park Drive	6.043	148.0		1	1		6		1				*	
148	13-0746 NC 280 (Airport Road) at SR 3539 (Fanning Bridge Road)	6.080	149.0		1	1		7		1				*	
149		6.018	150.0		1	1		7		1				*	
150	13-0801 NC 191 (Brevard Road) at I-40 EB Ramps	6.129	151.0		1	1		4		1				*	
151	13-0802 NC 191 / SR 3413 (Brevard Road) at I-40 WB Ramps	6.130	152.0		1	1		6		1				*	
152	13-0814 NC 280 (Airport Road) at I-26 EB Ramps	6.082	153.0		1	1		13		1			New base mounted cabinets for new DDI interchange	*	
153	13-0815 NC 280 (Airport Road) at I-26 WB Ramps	6.082	154.0		1	1		11		1			New base mounted cabinets for new DDI interchange	*	
154	13-0816 US 19-23 (Smokey Park Highway) at SR 1233/SR 3613 (Rutherford Road/Hilltop Drive)	6.139	155.0		1	1		6		1				1 1 1	
155	13-0818 US 19-23-74A (Patton Avenue) at Bear Creek Road	6.153	156.0		1	1		5		1				90 1	
156	13-0820 NC 280 (Airport Road) at SR 3568 (Rockwood Road)	6.083	157.0		1	1		9		1				*	
157	13-0821 NC 280 (Airport Road) at SR 3530 (Watson Road)	6.086	158.0		1	1		8		1				*	
158	13-0822 NC 280 (Airport Road) at SR 3522 (Old Shoals Road)	6.088	159.0		1	1		7		1				*	
159	13-0823 US 19-23 74A (Smokey Park Highway) at Ingles	6.149	160.0		1	1		4		1				*	
160	13-0830 NC 280 (Airport Road) at SR 3527 / SR 3529 (Rutledge Road) / Bradley Branch Road	6.086	161.0		1	1		10		1				*	
161	13-0836 US 74 (S Tunnel Road) at Asheville Mall / Asheville Market	6.186	162.0		1	1		10		1				*	
162	13-0837 NC 191 (Brevard Road) at Blue Ridge Parkway Ramp	6.114	163.0	Υ	1	1		6		1				*	
163	13-0839 NC 191 (Brevard Road) at SR 3480 (Bent Creek Ranch Road)	6.115	164.0		1	1		7		1				1	
164	13-0854 NC 192 (Brevard Road) at Pole Creaseman Road	6.117	165.0		1	1		5		1				*	
165	13-0868 US 19-23-74A (Patton Avenue) at Old Haywood Road	6.151	166.0		1	1		4		1				*	
166	13-0870 US 25A (Sweeten Creek Road) at Wesley Drive	6.270	167.0		1	1		4						1 25	
167	13-0893 SR 3187 (Pensacola Avenue) at US 25A (Sweeten Creek Road)	6.018	168.0		1	1		4		1				*	
168	13-0904 US 70-74A (Tunnel Road) at Ingles	6.190	169.0		1	1		9		1				*	
					·	•								*Reuse Existing	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

REVISIONS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NA

Summary of Work by Intersection (sheet 1 of 3)

Asheville Signal System

Division 13 Buncombe County 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892

INIT. DATE

CADD Filename: SIG 1.00W.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information									*Cor	nduit and Riser Wo	rk								Power	Service	
		Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	re Drill for 1" for	Drill for 2" for FO or CAT5/24VAC	Reuse Ex. 1" (pole) or 2" (base) ST Dedicated Riser for Comm (Retrofit Kit) Reuse Ex. 2" (or 3") Dedicated Conduit Entrance	Use 2" Spare Conduit for UG Comm	New 2" Riser (HST) for Comm	New 1-1/4" Riser (HST) for Comm to pole mtd cabine	New UG Conduit for Comm Entrance  New Cabinet Entrance in New Foundation for Comm  New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	(WH) for	Sig (replace existing)	New UG conduit to new foundation location for Sig New 2" short Risers for Sig (from terminal splice box or from UG)	Modify Existing Power Service - Install New Service Wires in Existing Conduit	Modify Existing Power Service - Install New Service Wires in New Conduit	Power Company to Provide Meter	Modify Existing Disconnect for New CCTV Power Service #	rice D ackup cup G	Install 5/8" x 10' Grounding Electrode Install New Electrical Service
145	13-0729 NC 146 (Long Shoals Road) at SR 3501 (Clayton Road)	6.101	146.0				1															
146	13-0731 NC 191 (Brevard Road) at SR 3431 (Pond Road)	6.128	147.0	Υ			1															
147	13-0741 US 25 (Hendersonville Road) at Vanderbilt Park Drive	6.043	148.0				1								1							
148	13-0746 NC 280 (Airport Road) at SR 3539 (Fanning Bridge Road)	6.080	149.0								1											
149		6.018	150.0			1					1											
150		6.129	151.0				1															
151		6.130	152.0				1															
152		6.082	153.0								1											
153		6.082	154.0								1											
154		6.139	155.0			1			1													
155		6.153	156.0						1													
156	13-0820 NC 280 (Airport Road) at SR 3568 (Rockwood Road)	6.083	157.0				1															
157		6.086	158.0						1													
158		6.088	159.0								1											
159		6.149	160.0				1															
160		6.086	161.0			1			1													
161		6.186	162.0				1															
162		6.114	163.0	Υ			1												1			
163		6.115	164.0				1															
164		6.117	165.0				1														***************************************	
165		6.151	166.0								1										7	
166		6.270	167.0							1												
167		6.018	168.0																			
168	13-0904 US 70-74A (Tunnel Road) at Ingles	6.190	169.0				1				Vocassassassassassassassassassassassassass										***************************************	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County

REVIEWED BY:

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CADD Filename: SIG 1.00X.dgn

Transportation 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

NA

REVISIONS INIT. DATE

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

|SIG.1.00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information															Signal	Items									
	NCDOT / CITY SIGNAL INV. NO.	INTERSECTION NAME	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	Standard Down Guy Assembly	Type I Post with Foundation	Type II Pedestal with Foundation	Junction Box Microwave Vehicle Detection	 Central Control Unit for APS Detector Station	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
145		NC 146 (Long Shoals Road) at SR 3501 (Clayton Road)	6.101	146.0			2		1		220																
146		NC 191 (Brevard Road) at SR 3431 (Pond Road)	6.128	147.0	Υ		2		1		610		1												***************************************	000000000000000000000000000000000000000	
147		US 25 (Hendersonville Road) at Vanderbilt Park Drive	6.043	148.0			1		1		260				970										***************************************	000000000000000000000000000000000000000	
148		NC 280 (Airport Road) at SR 3539 (Fanning Bridge Road)	6.08	149.0			•																				
149 150		US 25 (Hendersonville Road) at SR 3541 (Buck Shoals Road) / Stratford Road	6.018	150.0	•	•																					
150		NC 191 (Brevard Road) at I-40 EB Ramps  NC 191 / SR 3413 (Brevard Road) at I-40 WB Ramps	6.129	151.0 152.0																					***************************************	000000000000000000000000000000000000000	
152		NC 280 (Airport Road) at I-26 EB Ramps	6.13	152.0	_																				***************************************	000000000000000000000000000000000000000	
153		NC 280 (Airport Road) at I-26 WB Ramps	6.082	154.0																							
154		US 19-23 (Smokey Park Highway) at SR 1233/SR 3613 (Rutherford Road/Hilltop Drive)	6.139	155.0			2		1		310														***************************************	***************************************	
155		US 19-23-74A (Patton Avenue) at Bear Creek Road	6.153	156.0					•																***************************************	000000000000000000000000000000000000000	
156		NC 280 (Airport Road) at SR 3568 (Rockwood Road)	6.083	157.0		•	•																				
157		NC 280 (Airport Road) at SR 3530 (Watson Road)	6.086	158.0																					***************************************		
158		NC 280 (Airport Road) at SR 3522 (Old Shoals Road)	6.088	159.0			2		1		200													-	***************************************	00000	
159		US 19-23 74A (Smokey Park Highway) at Ingles	6.149	160.0			1		1		300				600										***************************************	VARADA (1970)	
160	13-0830	NC 280 (Airport Road) at SR 3527 / SR 3529 (Rutledge Road) / Bradley Branch Road	6.086	161.0																					week and the second		
161	13-0836	US 74 (S Tunnel Road) at Asheville Mall / Asheville Market	6.186	162.0			•																				
162	13-0837	NC 191 (Brevard Road) at Blue Ridge Parkway Ramp	6.114	163.0	Υ		1		1		250												***************************************			and the second s	
163	13-0839	NC 191 (Brevard Road) at SR 3480 (Bent Creek Ranch Road)	6.115	164.0			3		1		700				420					•					nd	000000000000000000000000000000000000000	
164	13-0854	NC 192 (Brevard Road) at Pole Creaseman Road	6.117	165.0			2		1		450																
165	13-0868	US 19-23-74A (Patton Avenue) at Old Haywood Road	6.151	166.0			1		1		200				420											9	
166	13-0870	US 25A (Sweeten Creek Road) at Wesley Drive	6.27	167.0			1		1		230															200000000000000000000000000000000000000	
167	13-0893	SR 3187 (Pensacola Avenue) at US 25A (Sweeten Creek Road)	6.018	168.0																							
168	13-0904	US 70-74A (Tunnel Road) at Ingles	6.19	169.0																					***************************************	000000000000000000000000000000000000000	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

REVISIONS

Asheville Signal System Summary of Work by

Transportation

Intersection (sheet 3 of 3)

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth REVIEWED BY:

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-CADD Filename: SIG 1.00Y.dgn

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

NA

INIT. DATE

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG 1 00 U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information													Controller, Cabinet & Foundation Work		
					2070 Controlle	1	e 170 pinet							Install New Controller & Cabinet		
							000000000000000000000000000000000000000			ě				Install New Foundation	(Se)	
					***************************************		***************************************			Bas					(degre	
	NCDOT / City Signal Inv. No. Intersection Name	Cable Routing Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	New	New	Existing New Aux File for Cabinet	No. of New Detector Cards	332	332 with Auxiliary File	(H)	Adjacent to Existing In Same Place as Existing	Relocated to (quadrant)	Comment	Terminal Splice Box Modify Foundation Remove Existing Foundation Base Extender Base Adapter  Pole (336S)  Ex. Height - Ground to Bottom (inch	Replace Asphalt ** Replace Brick (SF)
169	13-0920 US 19-23 74A (Patton Avenue) at Regent Park Boulevard / I-26 Ramps / I-240	6.161	170.0		1	1	***************************************	9		1					*	
170	13-0941 NC 191 (Brevard Road) at SR 3642 (Park S Boulevard) / Commerce Way	6.092	171.0		1	1	V1000	5		1					*	
171	13-0951 US 25 (Hendersonville Road) at Gerber Road	6.029	172.0		1	1		7		1					*	
172	13-0954 NC 146 (Long Shoals Road) at Linamar Entrance	6.104	173.0		1	1		10		1					*	
173	13-0955 SR 3556 (Meadow Road) at Victoria Road	6.176	174.0		1	1		4		1					*	
174	13-0970 I-240 EB Ramps at US 25 (Merrimon Avenue) / Broadway	6.054	175.0		1	1		8		1					*	
175	13-0977 US 25 (Hendersonville Road) at Caribou Road	6.038	176.0		1	1		6		1					1	
176	13-0984 US 25 (Hendersonville Road) at Hollywood Cinemas / Peachtree Road	6.031	177.0		1	1		6		1					1	
177	13-0992 Haywood Street / O'Henry Street at I-240 EB Entrance / Exit Ramp	6.333	178.0	Υ	1	1	000000000000000000000000000000000000000	6		1				Wireless	*	
178	13-0994 NC 191 (Brevard Road) at SR 3486 (Avery Creek Road) / Southwicke Drive / Glenn Bridge Road	6.090	179.0		1	1	***************************************	5		***************************************					1 30	
179	13-1003 SR 1368 (Lee's Creek Road) at SR 1369 (Old County Home Road)	6.260	180.0		1	1	***************************************	5							1 22	
180	13-1011 Overlook Road at Pinchot Drive / Springside Road	6.320	181.0		1	1		5		1					*	
181	13-1023 SR 1781 (Broadway) at Zillicoa Street / Campus Drive	6.067	182.0		1	1		8		1					*	
182	13-1029 US 19-23 74A (Patton Avenue) at I-240 EB Exit Ramp / I-26 SB Ramp	6.276	183.0		1	1	***************************************	2		***************************************					1 22	
183	13-1041 SR 3284 (Charlotte Street) at Beaumont Street / Max Street	6.285	184.0		1	1	000000000000000000000000000000000000000	8		1					*	
184	13-1059 US 25 (Hendersonville Road) at Skyland Crest Shopping Center / Oak Forest Boulevard	6.026	185.0		1	1		8		1					*	
185	13-1065 SR 3276 (Wood Avenue) at River Hills Shopping Center	6.312	186.0		1	1	***************************************	5		1					*	
186	13-1118 NC 280 (Airport Road) at J & S Cafeteria Airport Park Road / Terminal Drive	6.081	187.0		1	1	***************************************	8		1					*	
187	13-1119 US 25A (Sweeten Creek Road) at SR 3079 (Roberts Road)	6.212	188.0		1	1		4		1					*	
188	13-1122 US 19-23 74A (Smokey Park Highway) at Lowes Parking Lot Entrance	6.150	189.0	Υ	1	1		6		1					*	
189	13-1123 US 74A (S Tunnel Road) at Entrance to Lowes	6.185	190.0		1	1	***************************************	4		1					1	
190	13-1126 NC 146 (Long Shoals Road) at Schenck Pkwy / Skyland Inn Drive	6.103	191.0		1	1	***************************************	11		1					*	
191	13-1129 US 19-23 74A (Patton Avenue) at Parkwood Place/ Wilburn Road	6.156	192.0		1	1	***************************************	10		1					*	
192	13-1162 US 19-23 (Smokey Park Highway) at Westridge Market Place	6.141	193.0		1	1	***************************************	5		1					*	
															*Reuse Existing	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Asheville Signal System Summary of Work by Intersection (sheet 1 of 3)

Division 13	Вu
PLAN DATE: December	20

uncombe County

025892 Asheville 016 REVIEWED BY: M B Toth REVIEWED BY: INIT. DATE

CADD Filename: SIG 1.00Z.dgn

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles NA

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

U-4715B SIG.1.00A

## SUMMARY OF WORK BY INTERSECTION

	Reference Information									*	*Condui	it and Ri	ser Worl	ζ							Pow	er Ser	vice		
	CDOT / City gnal Inv. No. Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	Drill for 1" for New Power	e Drill for 2" for FO or CAT5.	. 1" (pole) or 2" (base) ST Dedicatec comm (Retrofit Kit)	Comm	Use 2" Spare Conduit for UG Comm	<u>.</u> 02	nduit for Comm Entrance	New Cabinet Entrance in New Foundation for Comm	New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	New 2" Risers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing) New UG conduit to new foundation location for Sig	sers for Sig (from terminal splic	Modify Existing Power Service - Install New Service Wires in Existing Conduit	Modify Existing Power Service - Install New Service Wires in New Conduit	Power Company to Provide Meter Modify Existing Disconnect for New CCTV Power Service #	ഗ്	Remove Backup Generator Equipment	Install Backup Generator connection Install 5/8" x 10' Grounding Electrode	Install New Electrical Service
169	13-0920 US 19-23 74A (Patton Avenue) at Regent Park Boulevard / I-26 Ramps / I-240	6.161	170.0				1															***************************************		000000000000000000000000000000000000000	
170	13-0941 NC 191 (Brevard Road) at SR 3642 (Park S Boulevard) / Commerce Way	6.092	171.0			1			1																
171	13-0951 US 25 (Hendersonville Road) at Gerber Road	6.029	172.0				1																		
172	13-0954 NC 146 (Long Shoals Road) at Linamar Entrance	6.104	173.0				***************************************																	***************************************	
173	13-0955 SR 3556 (Meadow Road) at Victoria Road	6.176	174.0			1		1	1																
174 175	13-0970 I-240 EB Ramps at US 25 (Merrimon Avenue) / Broadway	6.054	175.0 176.0				1	I																	
176	13-0977 US 25 (Hendersonville Road) at Caribou Road  US 25 (Hendersonville Road) at Hollywood Cinemas / Peachtree Road	6.038	177.0				1																		
177	13-0992 Haywood Street / O'Henry Street at I-240 EB Entrance / Exit Ramp	6.333	178.0	Υ		•	-															***************************************			
178	13-0994 NC 191 (Brevard Road) at SR 3486 (Avery Creek Road) / Southwicke Drive / Glenn Bridge Road	6.090	179.0				***************************************			1	1														
179	13-1003 SR 1368 (Lee's Creek Road) at SR 1369 (Old County Home Road)	6.260	180.0				***************************************				1											***************************************			
180	13-1011 Overlook Road at Pinchot Drive / Springside Road	6.320	181.0				***************************************				1														
181	13-1023 SR 1781 (Broadway) at Zillicoa Street / Campus Drive	6.067	182.0			1	***************************************		1																
182	13-1029 US 19-23 74A (Patton Avenue) at I-240 EB Exit Ramp / I-26 SB Ramp	6.276	183.0							1	1														
183	13-1041 SR 3284 (Charlotte Street) at Beaumont Street / Max Street	6.285	184.0			1	4		1																
184	13-1059 US 25 (Hendersonville Road) at Skyland Crest Shopping Center / Oak Forest Boulevard	6.026	185.0				1																		
185	13-1065 SR 3276 (Wood Avenue) at River Hills Shopping Center	6.312	186.0				1																		
186	13-1118 NC 280 (Airport Road) at J & S Cafeteria Airport Park Road / Terminal Drive	6.081	187.0				***************************************		1																
187	13-1119 US 25A (Sweeten Creek Road) at SR 3079 (Roberts Road)	6.212	188.0				1																		
188	13-1122 US 19-23 74A (Smokey Park Highway) at Lowes Parking Lot Entrance	6.150	189.0	Y					1																
189	13-1123 US 74A (S Tunnel Road) at Entrance to Lowes	6.185	190.0				***************************************				1														
190	13-1126 NC 146 (Long Shoals Road) at Schenck Pkwy / Skyland Inn Drive	6.103	191.0				***************************************	1														***************************************		***************************************	,
191	13-1129 US 19-23 74A (Patton Avenue) at Parkwood Place/ Wilburn Road	6.156	192.0				***************************************	1																	
192	13-1162 US 19-23 (Smokey Park Highway) at Westridge Market Place	6.141	193.0			1	***************************************				1											***************************************	***************************************	***************************************	

\* Includes new electrical service, special base adapter, intercepting and rerouting conduit for electrical service and all work associated with electrical service and grounding as described in the special provisions section for "Special Cabinet Base Adapter". See Special Provisions for explanation of Types.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

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Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth

Asheville 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

025892

NACADD Filename: SIG 1.00AA.dgn

U-4715B SIG.1.00B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information															Signal I	ems									
	NCDOT / CITY SIGNAL INV. NO.	INTERSECTION NAME	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	Standard Down Guy Assembly Type I Post with Foundation	Type II Pedestal with Foundation	Junction Box	Microwave Vehicle Detection System - Multiple Zones	Central Control Unit for APS	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
169	13-0920	US 19-23 74A (Patton Avenue) at Regent Park Boulevard / I-26 Ramps / I-240	6.161	170.0			2				330																
170	13-0941	NC 191 (Brevard Road) at SR 3642 (Park S Boulevard) / Commerce Way	6.092	171.0																	•						
171	13-0951	US 25 (Hendersonville Road) at Gerber Road	6.029	172.0			2		1		85															Annanananananananananananananananananan	
172	13-0954	NC 146 (Long Shoals Road) at Linamar Entrance	6.104	173.0			2		2	1	400															00000000000000000000000000000000000000	
173	13-0955	SR 3556 (Meadow Road) at Victoria Road	6.176	174.0			1		1		300																
174	13-0970	I-240 EB Ramps at US 25 (Merrimon Avenue) / Broadway	6.054	175.0			1		1		600																
175	13-0977	US 25 (Hendersonville Road) at Caribou Road	6.038	176.0																						Management of the second of th	
176	13-0984	US 25 (Hendersonville Road) at Hollywood Cinemas / Peachtree Road	6.031	177.0																						**************************************	
177	13-0992	Haywood Street / O'Henry Street at I-240 EB Entrance / Exit Ramp	6.333	178.0	Υ		2		2		600															**************************************	
178	13-0994	NC 191 (Brevard Road) at SR 3486 (Avery Creek Road) / Southwicke Drive / Glenn Bridge Road	6.09	179.0																						00000000000000000000000000000000000000	
179	13-1003	SR 1368 (Lee's Creek Road) at SR 1369 (Old County Home Road)	6.26	180.0																						00000hran	
180	13-1011	Overlook Road at Pinchot Drive / Springside Road	6.32	181.0								·															
181	13-1023	SR 1781 (Broadway) at Zillicoa Street / Campus Drive	6.067	182.0											600						•						
182	13-1029	US 19-23 74A (Patton Avenue) at I-240 EB Exit Ramp / I-26 SB Ramp	6.276	183.0																						www.	
183	13-1041	SR 3284 (Charlotte Street) at Beaumont Street / Max Street	6.285	184.0																						***************************************	
184	13-1059	US 25 (Hendersonville Road) at Skyland Crest Shopping Center / Oak Forest Boulevard	6.026	185.0																							
185	13-1065	SR 3276 (Wood Avenue) at River Hills Shopping Center	6.312	186.0			1		1		300															**************************************	
186	13-1118	NC 280 (Airport Road) at J & S Cafeteria Airport Park Road / Terminal Drive	6.081	187.0																						one on the second	
187	13-1119	US 25A (Sweeten Creek Road) at SR 3079 (Roberts Road)	6.212	188.0			1		1		100															**************************************	
188	13-1122	US 19-23 74A (Smokey Park Highway) at Lowes Parking Lot Entrance	6.15	189.0	Υ		1		1		400				420												
189	13-1123	US 74A (S Tunnel Road) at Entrance to Lowes	6.185	190.0																						Annonement	
190	13-1126	NC 146 (Long Shoals Road) at Schenck Pkwy / Skyland Inn Drive	6.103	191.0																						**************************************	
191	13-1129	US 19-23 74A (Patton Avenue) at Parkwood Place/ Wilburn Road	6.156	192.0			2		2	•	530															**************************************	
192	13-1162	US 19-23 (Smokey Park Highway) at Westridge Market Place	6.141	193.0			1		1		250															***************************************	

<sup>\*</sup> Includes new electrical service, special base adapter, intercepting and rerouting conduit for electrical service and all work associated with electrical service and grounding as described in the special provisions section for "Special Cabinet Base Adapter". See Special Provisions for explanation of Types.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INIT. DATE



NA

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County Asheville

Transportation PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

REVISIONS

025892

CADD Filename: SIG 1.00BB.dgn

U-4715B SIG.1.00C

## SUMMARY OF WORK BY INTERSECTION

		Reference Information												Controller,Cabinet & Foundation Work							
						207 Contro		e 170 abinet						Install New Controller & Cabinet							
								***************************************			Se			Install New Foundation				ees)			
			Cable Routing Sheet Number	Signal Design Sheet Number	iistorically significant area note at bottom of page)				File for Cabinet w Detector Cards		Auxiliary File Ba	to Existing	l to (quadrant)	Comment	Splice Box	undation	Existing Foundation	ont of Cabinet clockwise (degre	pter S)	t - Ground to Bottom (inches) oncrete (SF)	\sphalt **
	NCDOT / City				/near h ee box r	,	sting	sting	v Aux F		with /	acent t	ocated		minal Splic	Jify Fo	nove E	ate Fro	e Ada  e (336	Height	lace A
	Signal Inv. No.	Intersection Name			l/ ul	New	New Exis	Exis	No.	332	332	336 Adja In S	Relc		Ter	Мос	Ren	Rota Bas	Bas Pole	<u>я</u> 8	Rep
193	13-1165	US 25A (Sweeten Creek Road) at Medical Park Drive	6.211	194.0		1	1		6		1								*		
194	13-1170	US 25 (Hendersonville Road) at Walden Ridge Drive/South Pointe Centre	6.028	195.0		1	1	***************************************	9		1							*			
195	13-1185	NC 280 (Airport Road) at Target / McKenna Road	6.084	196.0		1	1	***************************************	10		1							*			
196	13-1186	NC 81 (Swannanoa River Road) at Bleachery Boulevard / Wal-Mart Supercenter	6.297	197.0		1	1		8		1						<u> </u>	1			
197	13-1187	SR 3238(Fairview Road) at Bleachery Boulevard / Old Fairview Road	6.216	198.0		1	1		7		1			Meter and disconnect not in line				1			
198	13-1193	US 25 (Hendersonville Road) at Valley Springs Road / Deerlake Drive	6.032	199.0		1	1	***************************************	7		1							*			
199	13-1194	SR 3556 (Meadow Road) at Short McDowell Street	6.178	200.0	Y	1	1		5		1							*			
200	13-1195	US 25 (Hendersonville Road) at Raquet Club Road	6.031	201.0		1	1		7		1							*			
201	13-1197	NC 280 (Airport Road) at Wal-Mart Supercenter / Birch Circle	6.087	202.0		1	1		7		1							*	•		
202	13-1207	NC 191 (Brevard Road) at Entrance to Borg-Warner / Industrial Drive	6.093	203.0		1	1	***************************************	5		1							*			
203	13-1209	US 19 Bus (Weaverville Road) at Senator Reynolds Road / Woodfin Avenue	6.075	204.0		1	1		7		1							*			
204	13-1214	US 74A (Charlotte Highway) at Old Charlotte Highway / Ingles	6.229	205.0		1	1	***************************************	7		1							*			
205	13-1215	NC 112 (Sand Hill Road) at SR 3437 (Lake Drive / Ent To Colbond)	6.235	206.0		1	1	***************************************	10		1							*			
206	13-1216	NC 146 (Long Shoals Road) at I-26 Ramps	6.102	207.0		1	1	***************************************	8		1							*			
207	13-1217	US 25 (Hendersonville Road) at Gerber Village	6.029	208.0		1	1	***************************************	8		1							*			
208	13-1218	NC 112 (Sand Hill Road) at Southeastern Container / Jacob Holm Way	6.238	209.0		1	1	***************************************	8		1			Reroute signal and lead-in cable to create spare conduit entrance for FO				*			
209	13-1225	I-40 EB Ramps at SR 2838 (Porters Cove Road)	6.206	210.0		1	1		3		1							*			
210	13-1226	SR 1368 (Lee's Creek Road) at Ent. To West Buncombe Elementary	6.259	211.0		1	1	***************************************	4		1							*	•		
211	13-1231	McDowell Street at Hospital Drive	6.172	212.0		1	1		7		1							*			
212	13-1240	US 25 (Merrimon Avenue) at Harris Teeter Entrance	6.056	213.0	Y	1	1		8		1							*			
213	13-1244	NC 280 (Airport Road) at The Landing / Dick's Sporting Goods	6.085	214.0		1	1	***************************************	8		1							1			
214	13-1245	NC 81 (Swannanoa River Road) at Azalea Road	6.310	215.0		1	1	***************************************	5		1							*			
215	13-1250	Sand Hill Road at Ingles / A-B Tech CC	6.233	216.0		1	1		6		1							*			
216		Sand Hill School Road at NC 112 (Sand Hill Road)	6.318	217.0		1	1		5		1						<u> </u>	*			

\* Includes new electrical service, special base adapter, intercepting and rerouting conduit for electrical service and all work associated with electrical service and grounding as described in the special provisions section for "Special Cabinet Base Adapter". See Special Provisions for explanation of Types.

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DOCUMENT NOT CONSIDERED FINAL **UNLESS ALL SIGNATURES COMPLETED** 



Asheville Signal System Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County

Asheville

PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

\*Reuse Existing

025892

NACADD Filename: SIG 1.00CC.dgn

## SUMMARY OF WORK BY INTERSECTION

		Reference Information								*(	'Condu	uit and	Riser Wor	k							Powe	r Serv	rice		
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	storically significant area ote at bottom of page)	Drill / Core Drill for 1" for New Power Service Drill / Core Drill for 2" for FO or CAT5/24VAC	e) or 2" (base) S Retrofit Kit)	c. 2" (or 3") Dec	are	New Z' Riser (HST) for Comm New 1-1/4" Riser (HST) for Comm to pole mtd cabine	W UG Conduit for Comm Entrance	inet Entrance in Ne	New 1/2" Risers (WH) for Sig- Pedestrian Push Buttons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	New 2" Risers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing) New UG conduit to new foundation location for Sig	s for Sig (from terminal splic	Modify Existing Power Service - Install New Service Wires in Existing Conduit	Modify Existing Power Service - Install New Service Wires in New Conduit	Power Company to Provide Meter  Modify Existing Disconnect for New CCTV Power  Service #	Install Service Disconnect by Signal Cabinet	Remove Backup Generator Equipment	Install Backup Generator connection Install 5/8" x 10' Grounding Electrode	Install New Electrical Service
193		US 25A (Sweeten Creek Road) at Medical Park Drive	6.211	194.0				1																	<u></u>
194		US 25 (Hendersonville Road) at Walden Ridge Drive/South Pointe Centre	6.028	195.0			1						***************************************											***************************************	
195		NC 280 (Airport Road) at Target / McKenna Road	6.084	196.0				1														***************************************			
196		NC 81 (Swannanoa River Road) at Bleachery Boulevard / Wal-Mart Supercenter	6.297	197.0				4			1														1
197 198		SR 3238(Fairview Road) at Bleachery Boulevard / Old Fairview Road US 25 (Hendersonville Road) at Valley Springs Road / Deerlake Drive	6.216	198.0 199.0			1	<b>I</b>																	<u> </u>
199		SR 3556 (Meadow Road) at Short McDowell Street	6.178	200.0	Υ		1						***************************************												
200		US 25 (Hendersonville Road) at Raquet Club Road	6.031	201.0	I		1	***************************************								0								***************************************	
201		NC 280 (Airport Road) at Wal-Mart Supercenter / Birch Circle	6.087	202.0			1																		
202		NC 191 (Brevard Road) at Entrance to Borg-Warner / Industrial Drive	6.093	203.0			1	***************************************														***************************************			
203		US 19 Bus (Weaverville Road) at Senator Reynolds Road / Woodfin Avenue	6.075	204.0				***************************************			1											***************************************		***************************************	
204		US 74A (Charlotte Highway) at Old Charlotte Highway / Ingles	6.229	205.0							1														
205	13-1215	NC 112 (Sand Hill Road) at SR 3437 (Lake Drive / Ent To Colbond)	6.235	206.0							1														
206	13-1216	NC 146 (Long Shoals Road) at I-26 Ramps	6.102	207.0				1																	
207	13-1217	US 25 (Hendersonville Road) at Gerber Village	6.029	208.0				1																***************************************	
208	13-1218	NC 112 (Sand Hill Road) at Southeastern Container / Jacob Holm Way	6.238	209.0		1					1														
209	13-1225	I-40 EB Ramps at SR 2838 (Porters Cove Road)	6.206	210.0							1														
210	13-1226	SR 1368 (Lee's Creek Road) at Ent. To West Buncombe Elementary	6.259	211.0							1														
211	13-1231	McDowell Street at Hospital Drive	6.172	212.0							1														
212	13-1240	US 25 (Merrimon Avenue) at Harris Teeter Entrance	6.056	213.0	Υ		1	***************************************																	
213	13-1244	NC 280 (Airport Road) at The Landing / Dick's Sporting Goods	6.085	214.0						1			***************************************									v	***************************************	***************************************	
214	13-1245	NC 81 (Swannanoa River Road) at Azalea Road	6.310	215.0						1			***************************************									***************************************	***************************************	v	
215	13-1250	Sand Hill Road at Ingles / A-B Tech CC	6.233	216.0						1															
216	13-1287	Sand Hill School Road at NC 112 (Sand Hill Road)	6.318	217.0	***************************************		1	***************************************					***************************************			***************************************						***************************************	***************************************	***************************************	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NA

Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

REVISIONS

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

025892

INIT. DATE CADD Filename: SIG 1.00DD.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00E U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information												Sig	al Item	S								
	NCDOT / CITY SIGNAL INV. NO.	INTERSECTION NAME	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head		Ognal Cable Messender Cable (3/8")	Signs Inductive Loop Sawcut		Sidewalk Guy Assembly Wood Pole	Standard Down Guy Assembly	Type I Post with Foundation	Type II Pedestal with Foundation	Junction Box Microwave Vehicle Detection System - Multiple Zones	APS Detector Station Central Control Unit for APS	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
193	13-1165	US 25A (Sweeten Creek Road) at Medical Park Drive	6.211	194.0			2		1	22	20		430											
194		US 25 (Hendersonville Road) at Walden Ridge Drive/South Pointe Centre	6.028	195.0																		***************************************		
195		NC 280 (Airport Road) at Target / McKenna Road	6.084	196.0																				
196		NC 81 (Swannanoa River Road) at Bleachery Boulevard / Wal-Mart Supercenter	6.297	197.0			2		1	60	00													
		SR 3238(Fairview Road) at Bleachery Boulevard / Old Fairview Road	6.216	198.0	•							 		 					•			•		
198		US 25 (Hendersonville Road) at Valley Springs Road / Deerlake Drive	6.032	199.0																				
199		SR 3556 (Meadow Road) at Short McDowell Street	6.178	200.0	Υ																			
200		US 25 (Hendersonville Road) at Raquet Club Road	6.031	201.0					•															
201		NC 280 (Airport Road) at Wal-Mart Supercenter / Birch Circle	6.087	202.0			2		2	30	J0													
202		NC 191 (Brevard Road) at Entrance to Borg-Warner / Industrial Drive	6.093	203.0			•				20													
203		US 19 Bus (Weaverville Road) at Senator Reynolds Road / Woodfin Avenue	6.075	204.0			2		2	80	J0													
204		US 74A (Charlotte Highway) at Old Charlotte Highway / Ingles	6.229	205.0					2	7/	20													
205		NC 112 (Sand Hill Road) at SR 3437 (Lake Drive / Ent To Colbond)	6.235	206.0			2		2	/(	00											***************************************	000000000000000000000000000000000000000	
206		NC 146 (Long Shoals Road) at I-26 Ramps	6.102	207.0			•			0.0	-0													
207		US 25 (Hendersonville Road) at Southeastern Container / Jacob Helm Way	6.029	208.0	•		2		2	25	20			 					•					
208		NC 112 (Sand Hill Road) at Southeastern Container / Jacob Holm Way	6.238	209.0	•		I			42	20	 		 										
209 210		I-40 EB Ramps at SR 2838 (Porters Cove Road)	6.206 6.259	210.0			1		1	л	00											***************************************	***************************************	
210		SR 1368 (Lee's Creek Road) at Ent. To West Buncombe Elementary  McDowell Street at Hospital Drive	6.172	211.0			I		ı	40	JU											***************************************	00000000000000000000000000000000000000	
					V							 												
212 213		US 25 (Merrimon Avenue) at Harris Teeter Entrance  NC 280 (Airport Road) at The Landing / Dick's Sporting Goods	6.056 6.085	213.0 214.0	Ţ																	***************************************	***************************************	
213		NC 81 (Swannanoa River Road) at Azalea Road	6.31	214.0																		**************************************		
215		Sand Hill Road at Ingles / A-B Tech CC	6.233	216.0																			000000000000000000000000000000000000000	
																•							***************************************	
210	13-128/	Sand Hill School Road at NC 112 (Sand Hill Road)	6.318	217.0																		***************************************		

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

NA

Transportation

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

REVISIONS

INIT. DATE

Division 13 Buncombe County Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CADD Filename: SIG 1.00EE.dgn

<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00F U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information												Controller,Cabinet & Foundation Work				
						2070 Controlle	Type 170							Install New Controller & Cabinet				
										Se				Install New Foundation (9)				
			Cable Routing Sheet Number	Signal Design Sheet	ificant area of page)			±.	rds	B			<u>.</u>	lation clockwise (degr		Bottom (inches)		
	NCDOT / City			Number	near historically sign box note at bottom	fina	ilia di la companya d	Aux File for Cabinet	of New Detector Ca	with Auxiliary File		icent to Existing	cated to (quadrant)	ninal Splice Box  lify Foundation  nove Existing Founc  ate Front of Cabinet  e Extender	e Adapter	Height - Ground to E	lace concrete (SF) lace Asphalt **	lace Brick (SF)
	Signal Inv. No.				l/ ul	New Exis	New Exis	New	Š	332	336	Adja	Rec	Moc Rott	Bas	Ľ.	Rep Rep	Rep
217		I-240 EB Off Ramp/ Woodfin Place at Charlotte Street	6.287	218.0		1	1		7	1	***************************************			Future Signal *				
218		US 25 (Hendersonville Road) at SR 1360 (Old Airport Road) / Ingles	6.013	219.0	Y	1	1		10	1	***************************************			*				
219		US 25 (Hendersonville Road) at SR 1545 (Cane Creek Road) / Library Road	6.011	220.0		1	1		10	1				*				
220		US 25 (Hendersonville Road) at SR 1538 (Howard Gap Road)	6.009	221.0		1	1		10	1				*				
221		US 25 (Asheville Hwy) at South Naples Road	6.001C	222.0		1	1		7	1	***************************************			*				
222		US 25 (Hendersonville Road) at SR 1358 (Fanning Bridge Road & Fletcher Fire Dept)	6.010	223.0		1	1		11	1	***************************************							
223		US 25 (Hendersonville Road / Asheville Hwy) at SR 1345 (Butler Bridge Road)	6.003	224.0		1	1		6	1								
224		US 25 (Hendersonville Road) at SR 2025 (Rockwell Drive)	6.006	225.0		1	1		9	1	***************************************			*				
225		US 25 (Asheville Hwy) at Rugby Drive	6.001A	226.0		1	1		5	1				*				
226		US 25 (Asheville Hwy) at I-26 EB Ramps	6.001	227.0		1	1		5	1				*				
227		US 25 (Asheville Hwy) at I-26 WB Ramps	6.001	228.0		1	1		6	1				*				
228		US 25 (Hendersonville Road) at SR 1361 (Baldwin Circle) / St. John Road	6.013	229.0		1	1		8	1	***************************************			*				
229		US 25 (Asheville Hwy) at New Naples Road	6.001D	230.0		1	1		8	1	***************************************			*				
230		US 25 (Hendersonville Road) at Smiley's Flea Market	6.004	231.0		1	1		4	1				1				
231		US 25 (Hendersonville Road) at SR 1537 (Old Brickyard Road)	6.005	232.0		1	1		4	1	***************************************			*				
232		NC 280 (Boylston Hwy) at SR 2277 (Ferncliff Park Drive)	6.077	233.0		1	1		5	1	***************************************			*				
233		US 25 (Hendersonville Road) at Mission / Pardee Health Campus (Alliance Page Road)	6.014	234.0		1	1		5	1				*				
234		NC 191 (Brevard Road) at PETCO	6.122	235.0		1	1		5	1				To be installed under I-5504 *				
235		NC 191 (Brevard Road) at I-26 Westbound Ramps	6.124	236.0		1	1		5	1	***************************************			To be installed under I-5504 *				
-		N. Bear Creek Road at Deaverview Road	6.239	237.0		1 1	1		4	1	***************************************	1		Elevated foundation has crack through middle, re-cable intersection 1 90 1				
		State Street at Hanover Street	6.302	238.0		1	1		2		***************************************				1	32		
<del>                                   </del>		Hazzard Street at Martin Luther King Drive	6.179	239.0		1	1		2						1	28		
-		W. Haywood St / Craven / Smith Br at Riverside Drive	6.274	240.0		1	1			1	***************************************			Coordinate with RADTIP and U-5019 1				-
<del></del>		US 70 (Tunnel Road) at Fire Station #8	6.196	241.0		1	1			1	***************************************	1		Locate new cabinet behind sidewalk 1 90 1				
-		Hospital Drive at Victoria Road / Hamilton Street	6.172	242.0		1	1		6	1				Maintain existing elevated foundation, re-cable intersection, fumish aluminum plate				
242	COA-008	Charlotte Street at E. Chestnut Street	6.288	243.0	Y	1	1		2		1			for cabinet overhang (see PSPs)  *Reuse				

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED Asheville Signal System



NA

Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

025892 Asheville REVIEWED BY: REVISIONS INIT. DATE

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<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

U-4715B

## SUMMARY OF WORK BY INTERSECTION

Reference Information									*Cond	duit and Riser Wo	ork						Po	wer Se	ervice		
Intersection Name	Cable Layout Sheet Number	t Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	rill / Core Drill for 1" for New Power	Drill / Core Drill for 2" for FO or CAT5/24VAC Reuse Ex. 1" (pole) or 2" (base) ST Dedicated Riser for Comm (Retrofit Kit)	') Dedica	9	New 2" Riser (HST) for Comm	New 1-1/4" Riser (HST) for Comm to pole mtd cabine	New UG Conduit for Comm Entrance  New Cabinet Entrance in New Foundation for Comm  New 1/2" Risers (WH) for Sig- Pedestrian Push Buthons	New 1" Risers (WH) for Sig- New Electrical Service	New 2" Risers (WH) for Sig- New Foundation Location	New 2" Risers (WH) for System Detector	New 2" Risers (WH) for Sig (replace existing)  New UG conduit to new foundation location for Sig  New 2" short Risers for Sig (from terminal splice	) I ⊆ 7	Modify Existing Power Service - Install New Service Wires in New Conduit	Power Company to Provide Meter  Modify Existing Disconnect for New CCTV Power	# Service Disconnect by Signal	up Generator Equipmen	Install Backup Generator connection	Install 5/8" x 10' Grounding Electrode Install New Electrical Service
240 EB Off Ramp/ Woodfin Place at Charlotte Street	6.287	218.0				***************************************				1				1							
S 25 (Hendersonville Road) at SR 1360 (Old Airport Road) / Ingles	6.013	219.0	Y			1															1
S 25 (Hendersonville Road) at SR 1545 (Cane Creek Road) / Library Road	6.011	220.0				1															
S 25 (Hendersonville Road) at SR 1538 (Howard Gap Road)	6.009	221.0				1															
S 25 (Asheville Hwy) at South Naples Road	6.001C	222.0				1													***************************************		
S 25 (Hendersonville Road) at SR 1358 (Fanning Bridge Road & Fletcher Fire Dept)	6.010	223.0				1												***************************************	***************************************		
S 25 (Hendersonville Road / Asheville Hwy) at SR 1345 (Butler Bridge Road)	6.003	224.0				1												***************************************	***************************************		
S 25 (Hendersonville Road) at SR 2025 (Rockwell Drive)	6.006	225.0				1															
S 25 (Asheville Hwy) at Rugby Drive	6.001A	226.0				1													***************************************	***************************************	
S 25 (Asheville Hwy) at I-26 EB Ramps	6.001	227.0				1												***************************************	9-10-10-10-10-10-10-10-10-10-10-10-10-10-	0	
S 25 (Asheville Hwy) at I-26 WB Ramps	6.001	228.0				1															
S 25 (Hendersonville Road) at SR 1361 (Baldwin Circle) / St. John Road	6.013	229.0				1															
S 25 (Asheville Hwy) at New Naples Road	6.001D	230.0			•	1												***************************************	***************************************	0	
S 25 (Hendersonville Road) at Smiley's Flea Market	6.004	231.0				1												***************************************	***************************************	***************************************	
S 25 (Hendersonville Road) at SR 1537 (Old Brickyard Road)	6.005	232.0				1											•		•		
C 280 (Boylston Hwy) at SR 2277 (Ferncliff Park Drive)	6.077	233.0								1									***************************************		
S 25 (Hendersonville Road) at Mission / Pardee Health Campus (Alliance Page Road)	6.014	234.0				9		1										***************************************	***************************************	***************************************	
C 191 (Brevard Road) at PETCO	6.122	235.0																			
C 191 (Brevard Road) at I-26 Westbound Ramps	6.124	236.0																			
Bear Creek Road at Deaverview Road	6.239	237.0				***************************************				1	1			2					***************************************	***************************************	3 1
tate Street at Hanover Street	6.302	238.0				***************************************			1		1		000000000000000000000000000000000000000	2				•	***************************************		3 1
azzard Street at Martin Luther King Drive	6.179	239.0				•	***************************************			1	1										3 1
/. Haywood St / Craven / Smith Br at Riverside Drive	6.274	240.0						1	•••••										***************************************		3 1
S 70 (Tunnel Road) at Fire Station #8	6.196	241.0			•	•				1	1			2 2				·	***************************************	, , , , , , , , , , , , , , , , , , ,	3 1
ospital Drive at Victoria Road / Hamilton Street	6.172	242.0				φ				1									ng		
harlotte Street at E. Chestnut Street	6.288	243.0	Y					1#		2	1			3			<u> </u>		***************************************		3 1
/. Haywood St / Crave S 70 (Tunnel Road) a ospital Drive at Victor	en / Smith Br at Riverside Drive  It Fire Station #8  ia Road / Hamilton Street	en / Smith Br at Riverside Drive 6.274 at Fire Station #8 6.196 ia Road / Hamilton Street 6.172	en / Smith Br at Riverside Drive 6.274 240.0  at Fire Station #8 6.196 241.0  ia Road / Hamilton Street 6.172 242.0	en / Smith Br at Riverside Drive 6.274 240.0  at Fire Station #8 6.196 241.0  ia Road / Hamilton Street 6.172 242.0	en / Smith Br at Riverside Drive 6.274 240.0  It Fire Station #8 6.196 241.0  ia Road / Hamilton Street 6.172 242.0	en / Smith Br at Riverside Drive 6.274 240.0  It Fire Station #8 6.196 241.0  ia Road / Hamilton Street 6.172 242.0	en / Smith Br at Riverside Drive 6.274 240.0  It Fire Station #8 6.196 241.0  ia Road / Hamilton Street 6.172 242.0	en / Smith Br at Riverside Drive 6.274 240.0  It Fire Station #8 6.196 241.0  ia Road / Hamilton Street 6.172 242.0	en / Smith Br at Riverside Drive       6.274       240.0       1         et Fire Station #8       6.196       241.0       1         ia Road / Hamilton Street       6.172       242.0       1         chestnut Street       6.288       243.0       Y       1#	en / Smith Br at Riverside Drive 6.274 240.0 1 1	#Risers / conduits may need to be in:	En / Smith Br at Riverside Drive   6.274   240.0   1   1   1   1   1   1   1   1   1	#Risers / conduits may need to be installed into the side of the s	en / Smith Br at Riverside Drive       6.274       240.0       1 <td>#Risers / conduits may need to be installed into the side of the extender; reuse existing  #Risers / conduits may need to be installed into the side of the extender; reuse existing</td> <td>#Risers / conduits may need to be installed into the side of the extender; reuse existing</td> <td>#Risers / conduits may need to be installed into the side of the extender; reuse existing</td> <td>#Risers / conduits may need to be installed into the side of the extender; reuse existing</td> <td>#Risers / conduits may need to be installed into the side of the extender; reuse existing</td> <td>#Risers / conduits may need to be installed into the side of the extender, reuse existing</td> <td>#Risers / conduits may need to be installed into the side of the extender, reuse existing</td>	#Risers / conduits may need to be installed into the side of the extender; reuse existing  #Risers / conduits may need to be installed into the side of the extender; reuse existing	#Risers / conduits may need to be installed into the side of the extender; reuse existing	#Risers / conduits may need to be installed into the side of the extender; reuse existing	#Risers / conduits may need to be installed into the side of the extender; reuse existing	#Risers / conduits may need to be installed into the side of the extender; reuse existing	#Risers / conduits may need to be installed into the side of the extender, reuse existing	#Risers / conduits may need to be installed into the side of the extender, reuse existing

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System Summary of Work by

Transportation

NA

Intersection (sheet 2 of 3) Division 13 Buncombe County

PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

CADD Filename: SIG 1.00GG.dgn

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

025892 Asheville

U-4715B SIG.1.00H

## SUMMARY OF WORK BY INTERSECTION

		Reference Information														S	ignal Iten	ns									
	NCDOT / City Signal Inv. No.		Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable  Messenger Cable (3/8")		Signs Inductive Loop Sawciit		Loop Lead-in Cable	Sidewalk Guy Assembly	Wood Pole Standard Down Guy Assembly	Type I Post with Foundation	Type II Pedestal with Foundation	Junction Box	Microwave Vehicle Detection System - Multiple Zones	APS Detector Station Central Control Unit for APS	Underground Conduit (1, 2")	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS Remove Line 24"
217	13-1288	I-240 EB Off Ramp/ Woodfin Place at Charlotte Street	6.287	218.0			1		1		1800		3 37	5 20	000					3							
218	14-0048	US 25 (Hendersonville Road) at SR 1360 (Old Airport Road) / Ingles	6.013	219.0	Y																						
219	14-0585	US 25 (Hendersonville Road) at SR 1545 (Cane Creek Road) / Library Road	6.011	220.0		***************************************																					
220	14-0595	US 25 (Hendersonville Road) at SR 1538 (Howard Gap Road)	6.009	221.0																							
221	14-0678	US 25 (Asheville Hwy) at South Naples Road	6.001C	222.0																							
222	14-0740	US 25 (Hendersonville Road) at SR 1358 (Fanning Bridge Road & Fletcher Fire Dept)	6.01	223.0																							
223	14-0742	US 25 (Hendersonville Road / Asheville Hwy) at SR 1345 (Butler Bridge Road)	6.003	224.0																							
224	14-0772	US 25 (Hendersonville Road) at SR 2025 (Rockwell Drive)	6.006	225.0																							
225	14-0852	US 25 (Asheville Hwy) at Rugby Drive	6.001A	226.0																							
226	14-0901	US 25 (Asheville Hwy) at I-26 EB Ramps	6.001	227.0																							
227	14-0902	US 25 (Asheville Hwy) at I-26 WB Ramps	6.001	228.0																							
228	14-1039	US 25 (Hendersonville Road) at SR 1361 (Baldwin Circle) / St. John Road	6.013	229.0																							
229	14-1050	US 25 (Asheville Hwy) at New Naples Road	6.001D	230.0																							
230	14-1145	US 25 (Hendersonville Road) at Smiley's Flea Market	6.004	231.0																							
231	14-1259	US 25 (Hendersonville Road) at SR 1537 (Old Brickyard Road)	6.005	232.0																							
232	14-1271	NC 280 (Boylston Hwy) at SR 2277 (Ferncliff Park Drive)	6.077	233.0																							
233	14-1278	US 25 (Hendersonville Road) at Mission / Pardee Health Campus (Alliance Page Road)	6.014	234.0																							
234	13-1283	NC 191 (Brevard Road) at PETCO	6.122	235.0																							
235	13-1284	NC 191 (Brevard Road) at I-26 Westbound Ramps	6.124	236.0																							
236	COA-001	N. Bear Creek Road at Deaverview Road	6.239	237.0					2		590			7	80												
237	COA-002	State Street at Hanover Street	6.302	238.0							410			3	70												
238	COA-004	Hazzard Street at Martin Luther King Drive	6.179	239.0							660			2	00												
239	COA-005	W. Haywood St / Craven / Smith Br at Riverside Drive	6.274	240.0							750																
240	COA-006	US 70 (Tunnel Road) at Fire Station #8	6.196	241.0			1				150													20			
241	COA-007	Hospital Drive at Victoria Road / Hamilton Street	6.172	242.0																							
242	COA-008	Charlotte Street at E. Chestnut Street	6.288	243.0	Υ	8	7			1	1630 15	0														***************************************	

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

025892

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CADD Filename: SIG 1.00HH.dgn

NA

Transportation

REVISIONS INIT. DATE

U-4715B SIG.1.00I

## SUMMARY OF WORK BY INTERSECTION

			Reference Information													Controller,Cabinet & Foundation Work					
							1	)70 troller	Type 170 Cabinet							Install New Controller & Cabinet					
													e e			Install New Foundation	(Sea)				
				Cable Routing	Signal Design Sheet	<u> </u>		***************************************			0		Bas				ion ockwise (degre			tom (inches)	
	1	DOT / City nal Inv. No.		Sheet Number	Number	In / near historically signific: (see box note at bottom of	New	Existing	New Existing	New Aux File for Cabinet	No. of New Detector Cards	332	332 with Auxiliary File	ું .હ્	dstiling e as Existin	Comment	Terminal Splice Box Modify Foundation Remove Existing Foundat Rotate Front of Cabinet clo	Base Extender		Ex. Height - Ground to Bott Replace concrete (SF)	Replace Asphalt ** Replace Brick (SF)
241	CC	DA-009	Charlotte Street at Hillside Street	6.289	244.0	Υ	1	***************************************	1		1						90		1^	30	
242	2 00	DA-010	Evelyn Place at Kimberly Avenue / Edwin Place	6.313	245.0	Υ	1		1		2						90		1	29	
243	3 00	DA-011	Fairview Road at Glendale Avenue	6.231	246.0		1		1		1						270		1	27	
244		DA-012	Fairview Road at Cedar Street / Oakley Elementary / Fire Station #9	6.216	247.0		1		1		1		1					1			
245	5 00	DA-013	Fairview Road at Baldwin Street / Onteora Boulevard	6.216	248.0		1		1		3		1					1			
246	S CC	DA-014	River Hills Center at River Hills Road	6.312	249.0		1		1	1	2		1					*			
247	' cc	OA-015	Victoria Road at Lily Carmichael Drive	6.322	250.0		1		1		5		1			New design by Davenport Engineers		*			
248	3 00	DA-016	Victoria Road at Fernihurst Drive	6.321	251.0	Υ	1		1		4		1				g	*			
249	00	DA-025	Fairview Road at Third Street	6.230	252.0		1	***************************************	1		3								1 :	29	
250	) cc	DA-103	College Street at Spruce Street	6.053	253.0	Υ	1		1		1			1		Wireless		*			
251	CC	DA-104	Market Street at College Street	6.053	254.0	Υ	1		1					1		Wireless		1			
252	2 00	DA-106	Lexington Avenue at College Street	6.332	255.0	Υ	1		1		1			1		Wireless		1		•	
253	3 00	OA-107	Haywood Street at College Street	6.332	256.0	Υ	1		1					1		Wireless		*			
254	l cc	DA-108	Coxe Avenue at Patton Avenue	6.331	257.0	Υ	1		1		1			1		Wireless		*			
255	5 00	OA-109	Asheland Avenue at Patton Avenue	6.331	258.0	Υ	1		1					1		Wireless		*			
256	S CC	OA-110	Otis Street at Patton Avenue	6.331	259.0	Υ	1		1	•				1		Wireless		*			
257	<sup>7</sup> CC	DA-111	French Broad Avenue at Patton Avenue	6.331	260.0	Υ	1		1		2			1		Wireless		*			
258	3 00	DA-113	Haywood Street at Patton Avenue	6.332	261.0	Υ	1		1		1			1		Wireless		1			
259	) (00	DA-114	Lexington Avenue at Patton Avenue	6.332	262.0	Υ	1		1					1		Wireless		*			
260	) cc	DA-118	Aston Street / Bus Depot at Asheland Avenue	6.331	263.0	Υ	1		1		2							1		•••••	
261	CC	DA-119	Aston Street / Bus Depot at Coxe Avenue	6.331	264.0	Υ	1		1		4			1	Install New Controller & Cabinet  Install New Foundation    Date   Date			*			
262	2 00	OA-201	Lexington Avenue at Hiawassee Street / Woodfin Street	6.054	265.0	Υ	1	**************************************	1					1		that enters through the base extender or in spare entrance. Antenn cable will use spare if power doesn't, or will be combined with Signa	180	1			
263	3 60	DA-204	Lexington Avenue at Walnut Street	6.054	266.0	Y	1		1					1		cabinet, power will enter base extender with new 1" metal conduit, antenna cable will combine with signal and lead-in cable.		*			
264		DA-301	S. Lexington Avenue at Hilliard Avenue	6.175	267.0		1		1		2			1			270	1			
		· - •			1.2			***************************************	nonenenene				***************************************			extender into cabinet, re-cable intersection		*Reuse	Existing		

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Transportation

NA

Asheville Signal System Summary of Work by Intersection (sheet 1 of 3)

Division 13 Buncombe County Asheville

PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

Melissa B. Toth CADD Filename: SIG 1.00II.dgn

025892

PROJECT REFERENCE NO. SIG.1.00J U-4715B

## SUMMARY OF WORK BY INTERSECTION

		Reference Information										*Con	nduit an	d Riser W	/ork									Power	Servi	ce		
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	Drill / Core Drill for 1" for New Power Service	Il for 2" for FO or CAT5/24VAC	Reuse Ex. 1" (pole) or 2" (base) ST Dedicated Riser for Comm (Retrofit Kit)	Reuse Ex. 2" (or 3") Dedicated Conduit Entrance for UG Comm	are		Riser (HST) for a	New UG Conduit for Comm Entrance New Cabinet Entrance in New Foundation	for Comm New 1/2" Risers (WH) for Sig- Pedestrian	Buttons 1" Disors (M/U) for Sig Now Floatrical Social	ers (wn) for Sig- New Electrical ers (WH) for Sig- New Foundati	Location New 2" Risers (W/H) for System Detector	anlace	conduit to new foundation location	New 2" short Risers for Sig (from terminal splice box or from UG)	Modify Existing Power Service - Install New Service Wires in Existing Conduit	Modify Existing Power Service - Install New Service Wires in New Conduit	Sompany to Provide Meter	Modify Existing Disconnect for New CCTV Power Service #	sconnect by Signal C	Remove Backup Generator Equipment	0' Grounding Elec	Install New Electrical Service
241		Charlotte Street at Hillside Street	6.289	244.0	Υ							1		4	1	1									***************************************		3	1
242	COA-010	Evelyn Place at Kimberly Avenue / Edwin Place	6.313	245.0	Υ							1		2	1	1											3	1
243	COA-011	Fairview Road at Glendale Avenue	6.231	246.0								1			1	1	***************************************							***************************************	***************************************	***************************************	3	1
244	COA-012	Fairview Road at Cedar Street / Oakley Elementary / Fire Station #9	6.216	247.0					1						1	1	***************************************							***************************************		***************************************	3	1
245	COA-013	Fairview Road at Baldwin Street / Onteora Boulevard	6.216	248.0											1	1	***************************************							***************************************	***************************************	***************************************	3	1
246	COA-014	River Hills Center at River Hills Road	6.312	249.0					1																			
247	COA-015	Victoria Road at Lily Carmichael Drive	6.322	250.0									1															
248	COA-016	Victoria Road at Fernihurst Drive	6.321	251.0	Υ						1						***************************************							***************************************	***************************************	***************************************		
249	COA-025	Fairview Road at Third Street	6.230	252.0								1					-							***************************************	***************************************	0		
250	COA-103	College Street at Spruce Street	6.053	253.0	Υ																							
251	COA-104	Market Street at College Street	6.053	254.0	Υ									***************************************			***************************************							***************************************		***************************************		
252	COA-106	Lexington Avenue at College Street	6.332	255.0	Υ												***************************************							000000000000000000000000000000000000000	***************************************	000000000000000000000000000000000000000		
253	COA-107	Haywood Street at College Street	6.332	256.0	Υ											······									***************************************			
254	COA-108	Coxe Avenue at Patton Avenue	6.331	257.0	Υ												\$											
255	COA-109	Asheland Avenue at Patton Avenue	6.331	258.0	Υ		•												•					***************************************				
256	COA-110	Otis Street at Patton Avenue	6.331	259.0	Y											<u> </u>	***************************************								w.	***************************************		i
257	COA-111	French Broad Avenue at Patton Avenue	6.331	260.0	Y											······	***************************************	2		***************************************					was	***************************************		<u>†</u>
258	COA-113	Haywood Street at Patton Avenue	6.332	261.0	Υ									***************************************			100000000000000000000000000000000000000							***************************************		***************************************		
259	COA-114	Lexington Avenue at Patton Avenue	6.332	262.0	Υ									document			-								***************************************	400000000000000000000000000000000000000		
260	COA-118	Aston Street / Bus Depot at Asheland Avenue	6.331	263.0	Υ											······	•••••			······································						***************************************		
261	COA-119	Aston Street / Bus Depot at Coxe Avenue	6.331	264.0	Υ												***************************************								***************************************	***************************************		
262	COA-201	Lexington Avenue at Hiawassee Street / Woodfin Street	6.054	265.0	Υ													2										1
263	COA-204	Lexington Avenue at Walnut Street	6.054	266.0	Υ												v								***************************************	***************************************	***************************************	1
264	COA-301	S. Lexington Avenue at Hilliard Avenue	6.175	267.0							1			7			***************************************			1\$						***************************************		
		I .	I		3					<u> </u>		<u> </u>	\$	New 1" sho	rt ris er fro	m disconn		binet ba	ise exte	nderfor	1	Ē.	i I			***	8	

\*\* Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Asheville Signal System Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892 Asheville REVIEWED BY: INIT. DATE

50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVISIONS NA

CADD Filename: SIG 1.00JJ.dgn

SIG.1.00K U-4715B

## SUMMARY OF WORK BY INTERSECTION

	Reference Information														8	ignal Ite	ems										
	NCDOT / City Signal Inv. No.	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	12-inch 3-Section Bi-Modal Signal Head	12-inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole	With	Type II Pedestal with Foundation	Junction Box	Microwave Vehicle Detection System - Multiple Zones	APS Detector Station Central Control Unit for APS	ector lergro	Underground Conduit (2, 2")	Thermopolastic Pavement Marking Lines (8", 120 MILS)	Thermoplastic White Stop Bar 24", 120 MILS	Thermoplastic White Crosswalk Line 24", 120 MILS	Remove Line 24"
241	COA-009 Charlotte Street at Hillside Street	6.289	244.0	Υ	4	6				690	300																
242	COA-010 Evelyn Place at Kimberly Avenue / Edwin Place	6.313	245.0	Υ	4	8				690	260					1 1	2					30				***************************************	
	COA-011 Fairview Road at Glendale Avenue	6.231	246.0			8				620	260					3	3								25	***************************************	
244	COA-012 Fairview Road at Cedar Street / Oakley Elementary / Fire Station #9	6.216	247.0			1		1		160														120	40	150	12
	COA-013 Fairview Road at Baldwin Street / Onteora Boulevard	6.216	248.0			1		1		190						1								170	155	370	
	COA-014 River Hills Center at River Hills Road	6.312	249.0																								
247	COA-015 Victoria Road at Lily Carmichael Drive	6.322	250.0																							***************************************	
248	COA-016 Victoria Road at Fernihurst Drive	6.321	251.0	Υ																						***************************************	
249	COA-025 Fairview Road at Third Street	6.23	252.0																								
250	COA-103 College Street at Spruce Street	6.053	253.0	Υ																						***************************************	
251	COA-104 Market Street at College Street	6.053	254.0	Υ																						***************************************	
252	COA-106 Lexington Avenue at College Street	6.332	255.0	Υ																						***************************************	
253	COA-107 Haywood Street at College Street	6.332	256.0	Υ																							
254	COA-108 Coxe Avenue at Patton Avenue	6.331	257.0	Υ																							
255	COA-109 Asheland Avenue at Patton Avenue	6.331	258.0	Υ																						***************************************	
256	COA-110 Otis Street at Patton Avenue	6.331	259.0	Υ																						***************************************	
257	COA-111 French Broad Avenue at Patton Avenue	6.331	260.0	Υ																						***************************************	
258	COA-113 Haywood Street at Patton Avenue	6.332	261.0	Υ																							
259	COA-114 Lexington Avenue at Patton Avenue	6.332	262.0	Υ																							
260	COA-118 Aston Street / Bus Depot at Asheland Avenue	6.331	263.0	Υ																							
261	COA-119 Aston Street / Bus Depot at Coxe Avenue	6.331	264.0	Υ																							
262	COA-201 Lexington Avenue at Hiawassee Street / Woodfin Street	6.054	265.0	Y						1010																	
263	COA-204 Lexington Avenue at Walnut Street	6.054	266.0	Y						850																	
264	COA-301 S. Lexington Avenue at Hilliard Avenue	6.175	267.0							780				700											***************************************	***************************************	

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Asheville Signal System Summary of Work by

Transportation 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles

Intersection (sheet 3 of 3)

Division 13 Buncombe County PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892 Asheville REVIEWED BY: REVISIONS INIT. DATE

CADD Filename: SIG 1.00KK.dgn

NA

U-4715B SIG.1.00L

## SUMMARY OF WORK BY INTERSECTION

		Reference Information													Controller, Cabinet & Foundation Work						
				2070 Type 170 Controller Cabinet											Install New Controller & Cabinet						
						. <del></del>	***************************************				9			· · · · · · · · · · · · · · · · · · ·	Install New Foundation			(see			
	NCDOT / City Signal Inv. No.	Intersection Name	Cable Routing Sheet Number	: Snaat	n / near historically significant area (see box note at bottom of page)		Existing	Existing	Aux Fi	OI New Delector	332 332 with Auxiliary File Ba	336	Adjacent to Existing In Same Place as Existing	Relocated to (quadrant)	Comment	Terminal Splice Box	/ Founda	Remove Existing Foundation Rotate Front of Cabinet clockwise (degre	xtender dapter 36S)	Ex. Height - Ground to Bottom (inches) Replace concrete (SF)	Replace Asphalt ** Replace Brick (SF)
	•	Hilliard Avenue at Church Street	6.175	268.0	Y	1	1	1		1		1	1		Intercept existing power conduit and extend to new foundation / base	•		1 27	0 1		
		Hilliard Avenue at Coxe Avenue	6.174	269.0		1	1	1				1			mounted cabinet, re-cable intersection  Power will enter through existing 1" metal conduit and through side of new base extedner; re-cable intersection; install aluminum plate for cabinet overhang (see PSPs)			27	0 1		
267	COA-304	Hilliard Avenue at Asheland Avenue	6.174	270.0		1	1	1	1	1		1			Power will enter through existing 1" metal conduit and through side of new base extender			90	) 1		
268	COA-305	Hilliard Avenue at S French Broad Avenue	6.174	271.0		1	1	1	2	2		1			Reroute lead-in cable to share conduit entrance with signal cable and use emptied conduit entrance for FO; maintain 1" conduit for power and have it enter the new base extender from the side.				1		
269	COA-401	Flint Street / Page Avenue at Haywood Street	6.333	272.0	Υ	1	1	1				1			Wireless				1		
270	COA-403	Montford Avenue at Haywood Street	6.278	273.0	Y	1	1	1	5	5	1								1		
271	COA-404	I-240 Ramps / Cherry Street / Hill Street at Montford Avenue	6.278	274.0	Υ	1	1	1	1 3	3	1								1		
272	COA-407	Montford Avenue at W. Chestnut Street	6.279	275.0	Y	1	1	1	1	1					Re-cable intersection; Cabinet to have special coating - see PSPs			27	0 1	29	
273	COA-409	Flint Street at Hiawassee Street	6.333	276.0	Υ	1	1	1	1	1		1			Wireless; Re-cable intersection; new power service will be routed through new 1" metal conduit into the side of the new base extender.			90	) 1		
274	COA-411	Montford Avenue at Soco Street / Cullowhee Street	6.280	277.0	Y	1	1	1	4	1	1	***************************************			Cabinet to have special coating. See PSPs.				*		
		То	tal			276	0 27	76 0	2 16	13	5 211	25	5 4 1 (	0		0	3	4	50 3 34	50	0 0

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

NA

Asheville Signal System Summary of Work by Intersection (sheet 1 of 3)

Transportation

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE

025892

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<sup>\*\*</sup> Replace Asphalt will be paid for under the same pay item as concrete sidewalk. See Project Special Provisions.

SIG.1.00M U-4715B

## SUMMARY OF WORK BY INTERSECTION

	ameN uojposasaatul  In / near historically significant area (see box note at bottom of page)  Drill / Core Drill for 1" for New Power Servic box note at bottom of page)  Drill / Core Drill for 2" for FO or CAT5/24/A  Reuse Ex. 1" (pole) or 2" (base) ST Dedic Biser for Comm (Retrofit Kit)  Reuse Ex. 2" (pole) or 2" (base) ST Dedic Riser for Comm  New UG Conduit for UG Comm  New UG Conduit for Comm Entrance  New UG Conduit for Comm to pole I  New UG Conduit for Sig- Pedestrian  New 1/2" Risers (WH) for Sig- Pedestrian  New 1/2" Risers (WH) for Sig- New Foundation  New 2" Risers (WH) for Sig- New Foundation																			Power	r Service			
	NCDOT / City Signal Inv. No. Intersection Name	Sheet	Sheet	ear historically box note at bo	Core Drill for 1" for New Power Se	rill / Core Drill for 2" for FO or CAT5/2	x. 1" (pole) or 2" (base) ST Di Comm (Retrofit Kit) x. 2" (or 3") Dedicated Condui	Spare Conduit for UG C	(HST) for Comm	Riser (HST) for Comm to pole mt	uit for Comm Entrance Intrance in New Found	Risers (WH) for Sig- Pe ons	ers (WH) for Sig- New Electrical Serv	s (WH) for Sig- New	New 2" Risers (WH) for System Detector	ers (WH) for Sig (replace existing)	New UG conduit to new foundation location for Sig New 2" short Risers for Sig (from terminal splice	lify Existin	' Existing in New C	O	Modify Existing Disconnect for New CCTV Power Service #	ce Disconnec	Install Backup Generator connection Install 5/8" x 10' Grounding Electrode	New Electrical Service
265		6.175	268.0				6.		1		1	•			***************************************	2	1						3	
266	COA-303 Hilliard Avenue at Coxe Avenue	6.174	269.0						1			-			***************************************								3	
267	COA-304 Hilliard Avenue at Asheland Avenue	6.174	270.0	***************************************		•			1			***************************************											3	
268	COA-305 Hilliard Avenue at S French Broad Avenue	6.174	271.0	***************************************			1					-			***************************************	2							3	
269	COA-401 Flint Street / Page Avenue at Haywood Street	6.333	272.0	Υ																			3	1
270	COA-403 Montford Avenue at Haywood Street	6.278	273.0	Y		1					1	***************************************												
271	COA-404 I-240 Ramps / Cherry Street / Hill Street at Montford Avenue	6.278	274.0	Y					1															
272	COA-407 Montford Avenue at W. Chestnut Street	6.279	275.0	Υ			0			1		•											3	1
273	COA-409 Flint Street at Hiawassee Street	6.333	276.0	Y												2							3	1
274	COA-411 Montford Avenue at Soco Street / Cullowhee Street	6.28	277.0	Y		1	***************************************		1															
	Tot	al	,	,	0	35	56 48	1	54	24	63 7	8	13	0	16	36	3 5	0	1	8	0	0 0 0	0 54	23

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#### ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED Asheville Signal System



NA

Summary of Work by Intersection (sheet 2 of 3)

Division 13 Buncombe County 50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY:

REVISIONS

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892

INIT. DATE CADD Filename: SIG 1.00MM.dgn

U-4715B SIG.1.00N

## SUMMARY OF WORK BY INTERSECTION

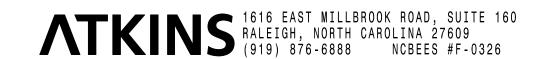
	Reference Information				;	Signal Iten	ns																			
	NCDOT / City Signal Inv. No. Intersection Name	Cable Layout Sheet Number	Signal Design Sheet Number	In / near historically significant area (see box note at bottom of page)	16-inch Countdown Pedestrian Signal Head	12-inch 3-Section Signal Head	inch 4-Section Signal Head	12-inch 5-Section Signal Head	Signal Cable	Messenger Cable (3/8")	Signs	Inductive Loop Sawcut	Loop Lead-In Cable	Sidewalk Guy Assembly	Wood Pole Standard Down Guy Assembly	Type I Postwith Foundation	Type II Pedestal with Foundation	Junction Box	Microwave Vehicle Detection System - Multiple Zones APS Detector Station	Central Control Unit for APS Detector Station	Underground Conduit (1, 2")	Underground Conduit (2, 2")		rmoplastic White Stop Bar 24", 120 MILS	ermoplastic	Remove Line 24"
	COA-302 Hilliard Avenue at Church Street	6.175	268.0	Υ					310				180			-								***************************************		
266	COA-303 Hilliard Avenue at Coxe Avenue	6.174	269.0						1390									1								
267	COA-304 Hilliard Avenue at Asheland Avenue	6.174	270.0						480		-	75	350											***************************************		<del></del>
268	COA-305 Hilliard Avenue at S French Broad Avenue	6.174	271.0						1250				450													
269	COA-401 Flint Street / Page Avenue at Haywood Street	6.333	272.0	Υ					700																	
270	COA-403 Montford Avenue at Haywood Street	6.278	273.0	Υ					•																	
271	COA-404 I-240 Ramps / Cherry Street / Hill Street at Montford Avenue	6.278	274.0	Υ	•						•	75	270				•	1			<u> </u>					
272	COA-407 Montford Avenue at W. Chestnut Street	6.279	275.0	Υ					340				50													
273	COA-409 Flint Street at Hiawassee Street	6.333	276.0	Υ					270				140											***************************************		
274	COA-411 Montford Avenue at Soco Street / Cullowhee Street	6.28	277.0	Υ														•						vangummannannannannannannannannannannannannan		
	Total				46	159 0	110	6	56220	970	10 13	336 2	28200	0	1 5	22	4	31	1 30	4	1415	20	290	220 5	520	12

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Transportation

Asheville Signal System Summary of Work by Intersection (sheet 3 of 3)

Division 13 Buncombe County

Asheville PLAN DATE: December 2016 REVIEWED BY: M B Toth

025892

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50 Greenfield Parkway, Garner, NC 27529 PREPARED BY: J A Wiles REVIEWED BY: REVISIONS INIT. DATE NA