



**NOTES:**  
 1. UNLESS OTHERWISE NOTED:  
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.  
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.  
 - ATTACH ON FRONT SIDE (FS) OF POLE.  
 2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER, AT ALL JUNCTION BOX / CABINET ENTRANCES.

1. INSTALL COMPOSITE CCTV CABLE	13. INSTALL HEAT SHRINK TUBING RETROFIT KIT	25. INSTALL NEW RISER INTO POLE MOUNTED CABINET	37. INSTALL CCTV WOOD POLE	49. REMOVE EXISTING COMMUNICATIONS CABLE	60A. INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO CABINET)	72. INSTALL 900 MHZ RADIO WITH PANEL ANTENNA
2. INSTALL LOW VOLTAGE POWER CABLE (24VAC)	14. INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	26. INSTALL DIGITAL VIDEO ENCODER	38. INSTALL STANDARD SIZE JUNCTION BOX	50. INSTALL WIRELESS DSL	61. REMOVE EXISTING CCTV CAMERA ASSEMBLY	73. INSTALL 2.4 GHZ ETHERNET RADIO AND YAGI ANTENNA
3. INSTALL CATEGORY 5E CABLE	15. DIRECTIONAL DRILL CONDUIT	27. INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	39. INSTALL SPECIAL-SIZED JUNCTION BOX	51. INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62. NEW CABINET ENTRANCE INTO NEW FOUNDATION	74. INSTALL 2.4 GHZ ETHERNET RADIO
4. INSTALL SMFO CABLE	16. BORE AND JACK CONDUIT	28. INSTALL INTERCONNECT CENTER PATCH PANEL JUMPERS, AND FUSION SPlice CABLE IN CABINET	40. INSTALL OVER-SIZED JUNCTION BOX	52. INSTALL DELINEATOR MARKER	63. DRILL/CORE DRILL EXISTING FOUNDATION	75. INSTALL OMNI ANTENNA
5. INSTALL COAXIAL ANTENNA CABLE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	29. INSTALL UNDERGROUND SPlice ENCLOSURE	41. REMOVE EXISTING JUNCTION BOX	53. STORE 50 FEET OF COMMUNICATIONS CABLE (EACH CABLE)	64. INTERCEPT AND REROUTE EXISTING CONDUITS	76. INSTALL 900 MHZ ETHERNET RADIO
6. INSTALL FIBER-OPTIC DROP CABLE	18. INSTALL CABLE(S) IN NEW CONDUIT	30. INSTALL AERIAL SPlice ENCLOSURE	42. INSTALL WOOD POLE	54. LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65. BOND MESSENGER TO POLE GROUND	77. INSTALL CCTV METAL POLE
7. INSTALL TRACER WIRE	19. INSTALL CABLE(S) IN EXISTING RISER(S)	31. INSTALL SPlice CABINET	43. REMOVE EXISTING WOOD POLE	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE	66. BOND RISER TO POLE GROUND	78. REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
8. INSTALL CONDUIT UNDERGROUND	20. INSTALL CABLE(S) IN NEW RISER(S)	32. MODIFY EXISTING SPlice ENCLOSURE OR INTERCONNECT CENTER	44. INSTALL AERIAL GUY ASSEMBLY	56. LASH CABLE(S) TO NEW MESSENGER CABLE	67. BOND TRACER WIRE TO EQUIPMENT GROUND BUS	79. INSTALL CELLULAR MODEM
9. INSTALL PVC CONDUIT	21. INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE	33. REMOVE EXISTING SPlice / HUB / CCTV CABINET	45. INSTALL STANDARD GUY ASSEMBLY	57. MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68. BOND TRACER WIRE TO POLE GROUND	80. INSTALL YAGI ANTENNA
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	22. INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	34. INSTALL CABINET FOUNDATION	46. INSTALL SIDEWALK GUY ASSEMBLY	58. INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69. HANDLASH AND INSTALL AERIAL CABLE PROTECTOR	
11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	23. INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	35. REMOVE EXISTING CABINET FOUNDATION	47. INSTALL MESSENGER CABLE	59. INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70. INSTALL HUB CABINET	
12. INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	24. INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	36. INSTALL CCTV CAMERA ASSEMBLY	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60. INSTALL NEW POLE MOUNTED CCTV CABINET (NEMA TYPE 4)	71. INSTALL MANAGED ETHERNET SWITCH	

**ATTACHMENT POINT:**  
 XXX DISTANCE ABOVE (IN) REFERENCE POINT  
 YYY REFERENCE POINT DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLOLOGY KEY**

NUMBER OF CABLE(S)/LOOPS, DETECTOR AMPLIFIERS, GUYS, ANTENNAS: XX  
 NUMBER OF RISERS/ CONDUIT(S): XX  
 DIAMETER OF RISERS/ CONDUIT(S) (IN): XX  
 NUMBER OF FIBER/TWISTED PAIRS: XX

**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
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**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

Prepared for the Offices of:

**NC Transportation**  
 750 Greenfield Parkway, Garner, NC 27529

**Asheville Signal System Cable Routing Plans**

Division 13 Buncombe County Asheville

PLAN DATE: December 2016 REVIEWED BY: M B Toth  
 PREPARED BY: J A Wiles REVIEWED BY:

REVISIONS: INIT. DATE

12/15/2016  
 MELISSA B. TOTH  
 ENGINEER  
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