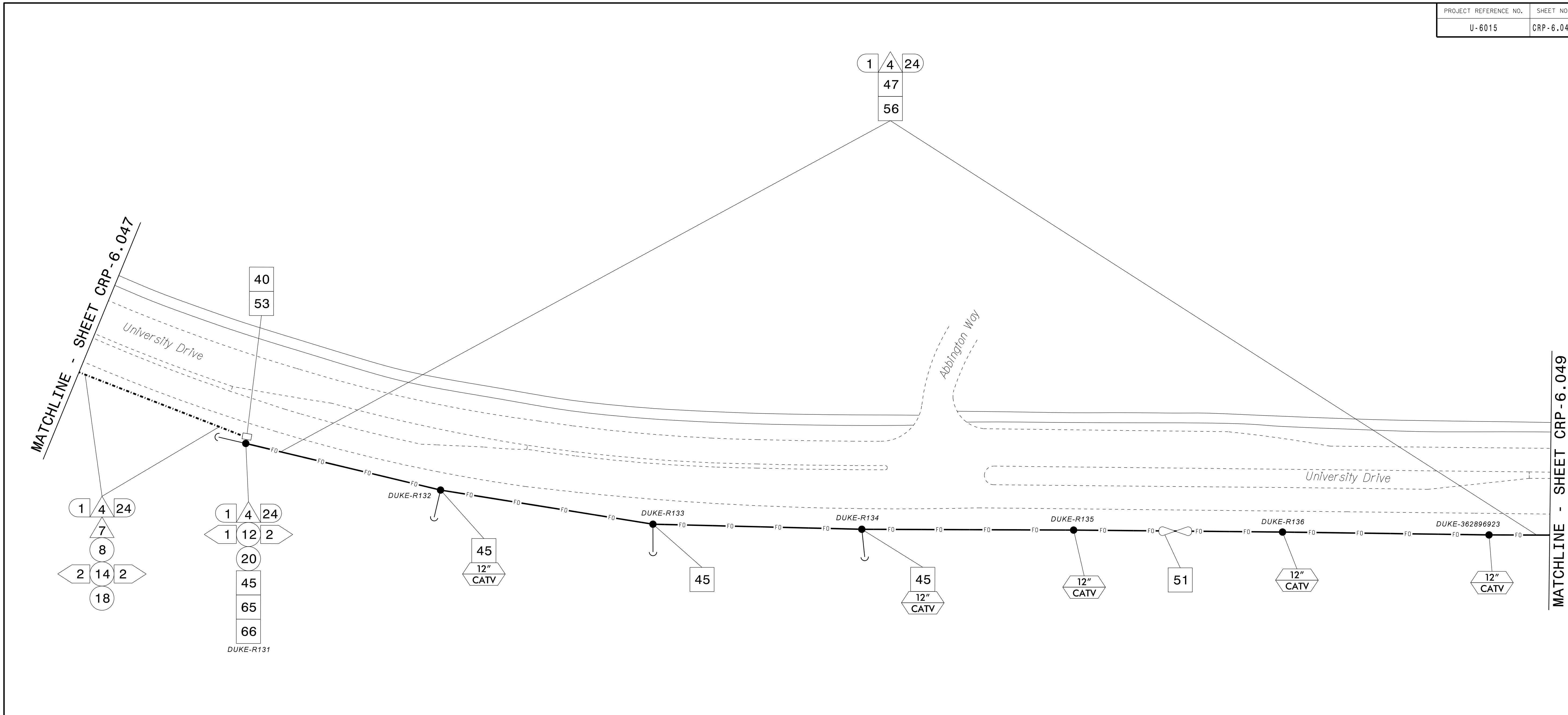


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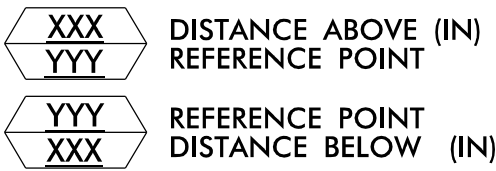
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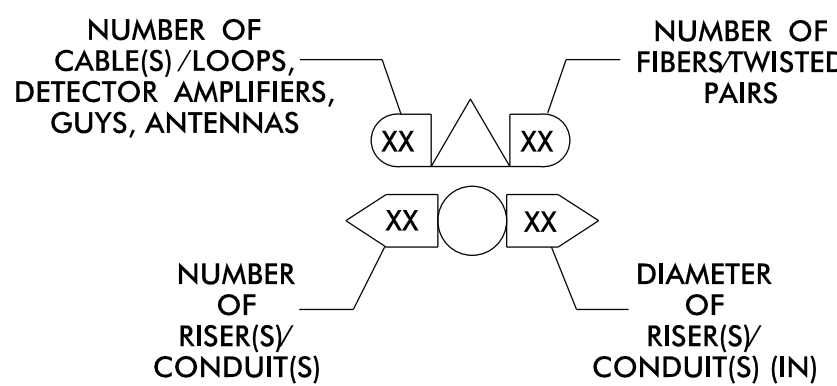
**NOTES:**

- UNLESS OTHERWISE NOTED:
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  - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
  - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

**ATTACHMENT POINT:**



**CONSTRUCTION NOTE SYMBOLOLOGY KEY**



**ATKINS**

1616 EAST MILLBROOK ROAD, SUITE 160  
 RALEIGH, NORTH CAROLINA 27609  
 (919) 878-6888 NCBEES #F-0326

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

Prepared for the Offices of:  
  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: B J Slocum

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 025892

MELISSA B. TOTH

DocuSigned by:  
 Melissa B. Toth/13/2018

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1	INSTALL CATEGORY 6 CABLE
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)
3	INSTALL COMPOSITE CCTV CABLE
4	INSTALL SMFO CABLE
5	INSTALL COAXIAL ANTENNA CABLE
6	INSTALL FIBER-OPTIC DROP CABLE
7	INSTALL TRACER WIRE
8	INSTALL CONDUIT UNDERGROUND
9	INSTALL PVC CONDUIT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT

11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING
13	INSTALL HEAT SHRINK TUBING KIT
14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT
15	DIRECTIONAL DRILL CONDUIT
16	BORE AND JACK CONDUIT
17	INSTALL CABLE(S) IN EXISTING CONDUIT
18	INSTALL CABLE(S) IN NEW CONDUIT
19	INSTALL CABLE(S) IN EXISTING RISER(S)
20	INSTALL CABLE(S) IN NEW RISER(S)
21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE

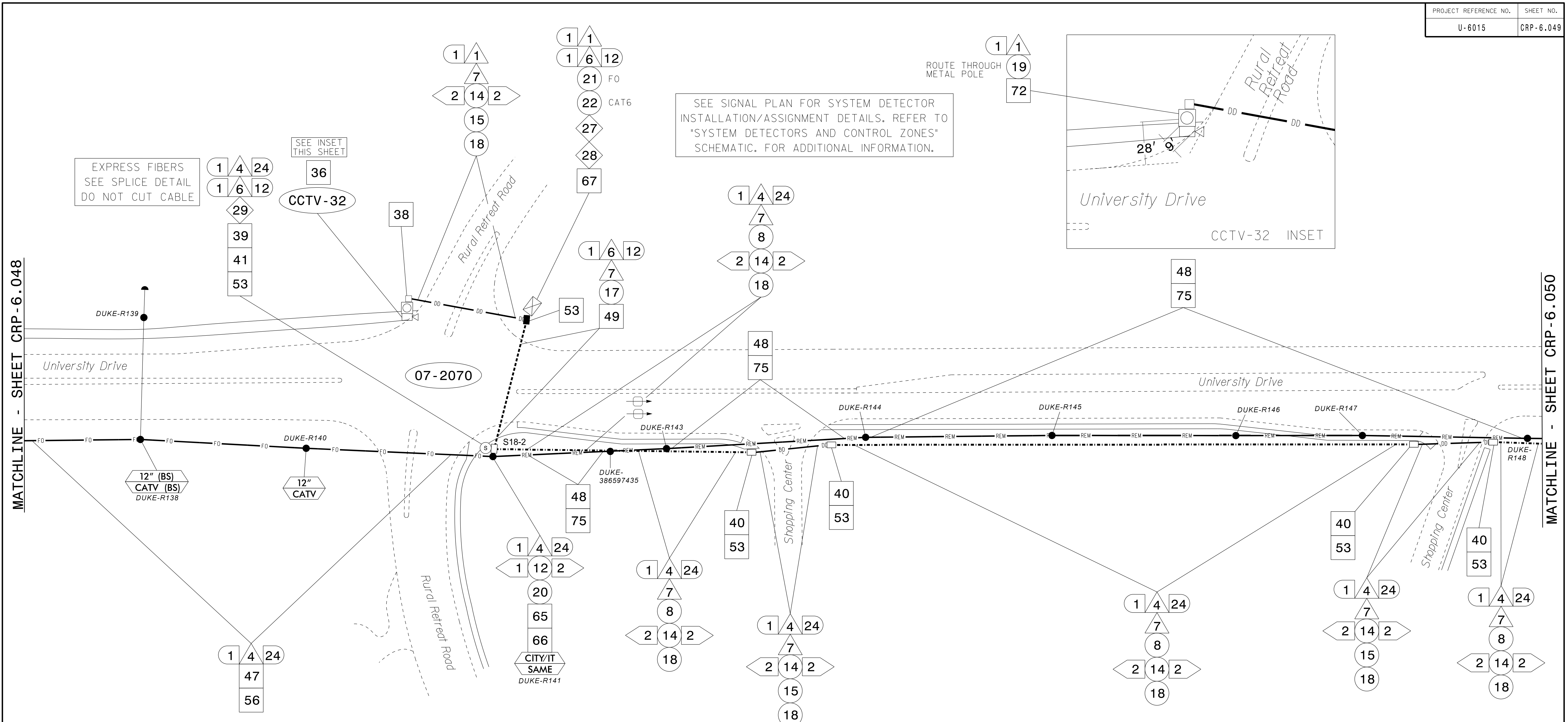
22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)
23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)
24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET
25	INSTALL NEW RISER INTO POLE MOUNTED CABINET
26	INSTALL DIGITAL VIDEO ENCODER
27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET
28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPlice CABLE IN CABINET
29	INSTALL UNDERGROUND SPlice ENCLOSURE
30	INSTALL AERIAL SPlice ENCLOSURE
31	INSTALL SPlice CABINET

32	MODIFY EXISTING SPlice ENCLOSURE OR INTERCONNECT CENTER
33	REMOVE EXISTING SPlice /HUB /CCTV CABINET
34	INSTALL CABINET FOUNDATION
35	REMOVE EXISTING CABINET FOUNDATION
36	INSTALL CCTV CAMERA ASSEMBLY
37	INSTALL CCTV WOOD POLE
38	INSTALL STANDARD SIZE JUNCTION BOX
39	INSTALL SPECIAL-SIZED JUNCTION BOX
40	INSTALL OVER-SIZED JUNCTION BOX
41	REMOVE EXISTING JUNCTION BOX
42	INSTALL WOOD POLE

43	REMOVE EXISTING WOOD POLE
44	INSTALL AERIAL GUY ASSEMBLY
45	INSTALL STANDARD GUY ASSEMBLY
46	INSTALL SIDEWALK GUY ASSEMBLY
47	INSTALL MESSENGER CABLE
48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE
49	REMOVE EXISTING COMMUNICATIONS CABLE
50	INSTALL SERVICE CONDUCTORS
51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE
52	INSTALL DELINEATOR MARKER
53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)
54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE

55	LASH CABLE(S) TO EXISTING MESSENGER CABLE
56	LASH CABLE(S) TO NEW MESSENGER CABLE
57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV
58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO
59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)
60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)
60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)
61	REMOVE EXISTING CCTV CAMERA ASSEMBLY
62	NEW CABINET ENTRANCE INTO NEW FOUNDATION
63	DRILL/CORE DRILL EXISTING FOUNDATION
64	INTERCEPT AND REROUTE EXISTING CONDUITS
65	BOND MESSENGER TO POLE GROUND

66	BOND RISER TO POLE GROUND
67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
68	BOND TRACER WIRE TO POLE GROUND
69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
70	INSTALL CCTV CABINET DISCONNECT
71	INSTALL MANAGED ETHERNET SWITCH
72	INSTALL CCTV METAL POLE
73	REMOVE EXISTING CCTV METAL POLE
74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
75	BACKPULL AND COIL CITY IT CABLE
76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)



- NOTES:**
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YYY DISTANCE ABOVE (IN)  
REFERENCE POINT

YYY  
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DISTANCE BELOW (IN)

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NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS: XX △ XX

NUMBER OF RISER(S) / CONDUIT(S): XX ○ XX

NUMBER OF FIBER/TWISTED PAIRS: XX △ XX

DIAMETER OF RISER(S) / CONDUIT(S) (IN): XX ○ XX

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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
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Prepared for the Offices of:  

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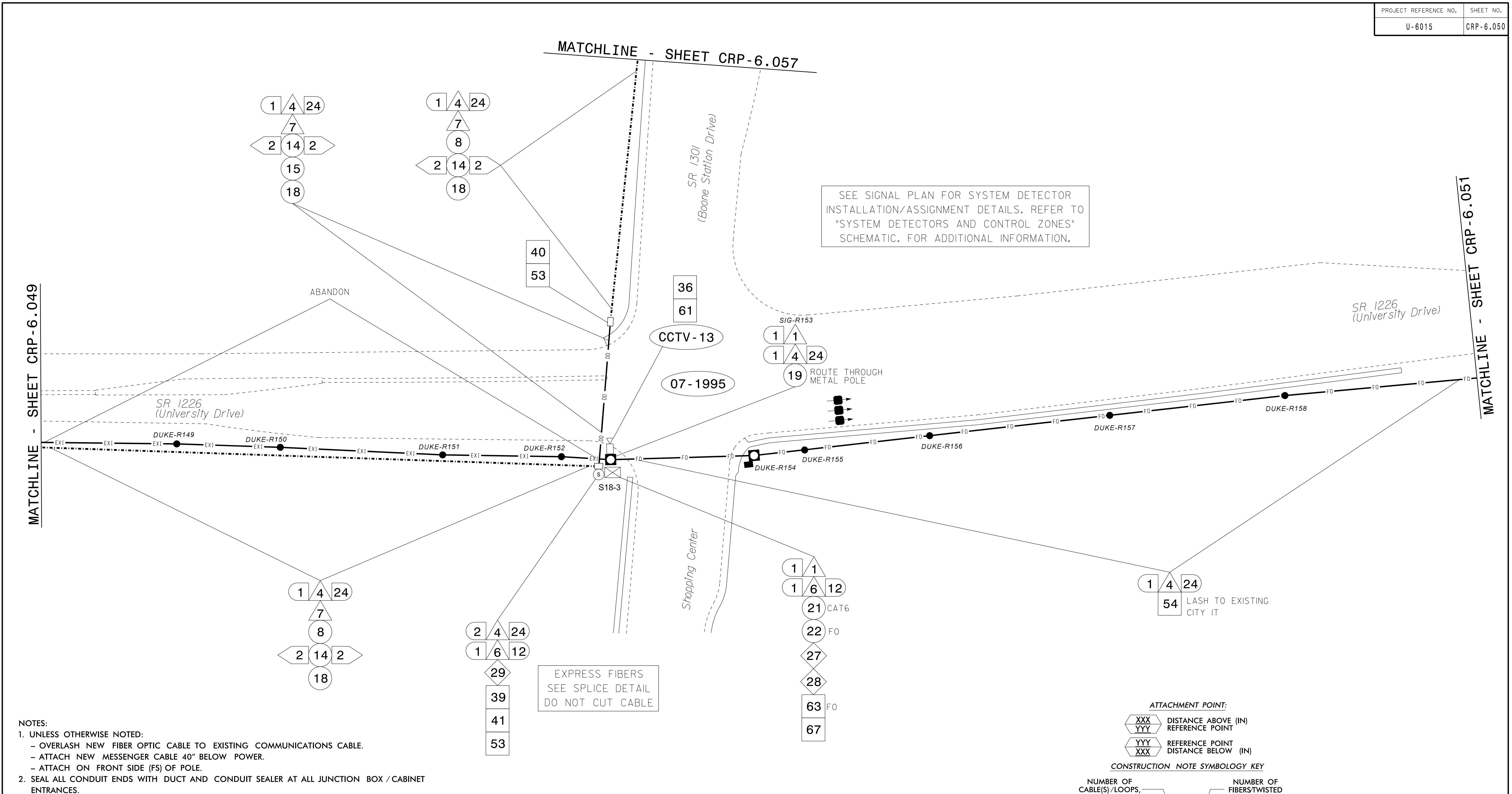
**Burlington-Graham Signal System Cable Routing Plans**

PLAN DATE: June 2018  
 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth  
 REVISIONS: \_\_\_\_\_ INIT. DATE: \_\_\_\_\_

750 Greenfield Parkway, Garner, NC 27529  
 SCALE: 0 50  
 1"=50'

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 025892  
 MELISSA B. TOTH  
 Melissa B. Toth/13/2018  
 DATE: \_\_\_\_\_  
 CADD File name: CL-049.dgn

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SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

EXPRESS FIBERS SEE SPLICE DETAIL DO NOT CUT CABLE

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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

REVISIONS INIT. DATE

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

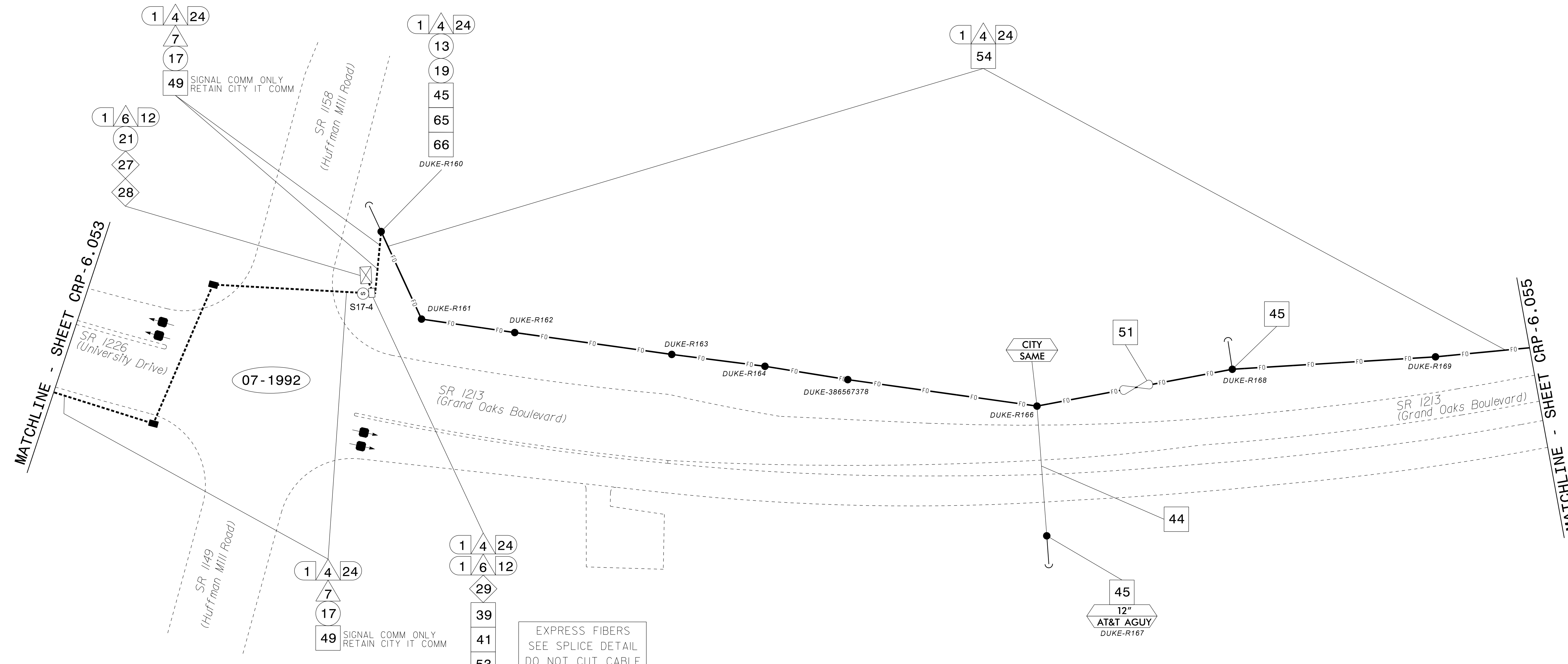
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EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

SEE SIGNAL PLAN FOR SYSTEM DETECTOR  
INSTALLATION/ASSIGNMENT DETAILS. REFER TO  
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NUMBER OF CABLE(S)/LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS: XX (triangle symbol)

NUMBER OF RISER(S)/CONDUIT(S): XX (circle symbol)

DIAMETER OF RISER(S)/CONDUIT(S) (IN): XX (circle symbol)

NUMBER OF FIBER/TWISTED PAIRS: XX (square symbol)

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PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

025892

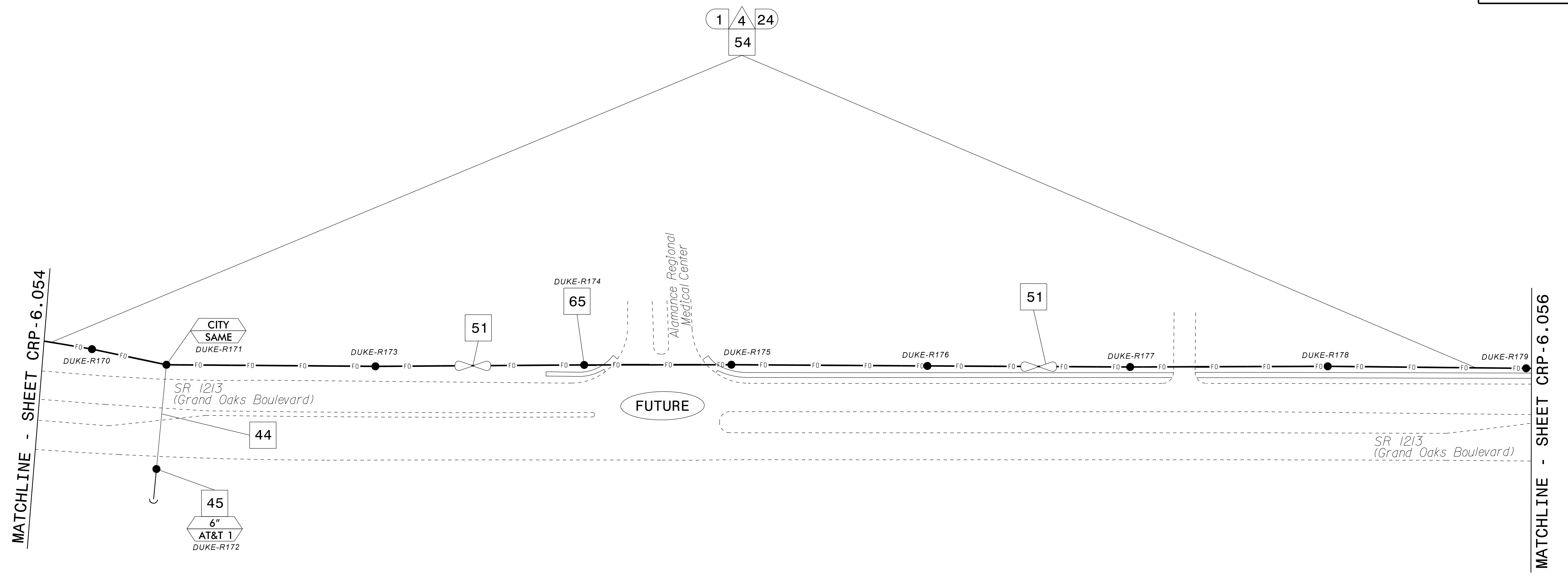
MELISSA B. TOTH

DATE: 11/13/2018

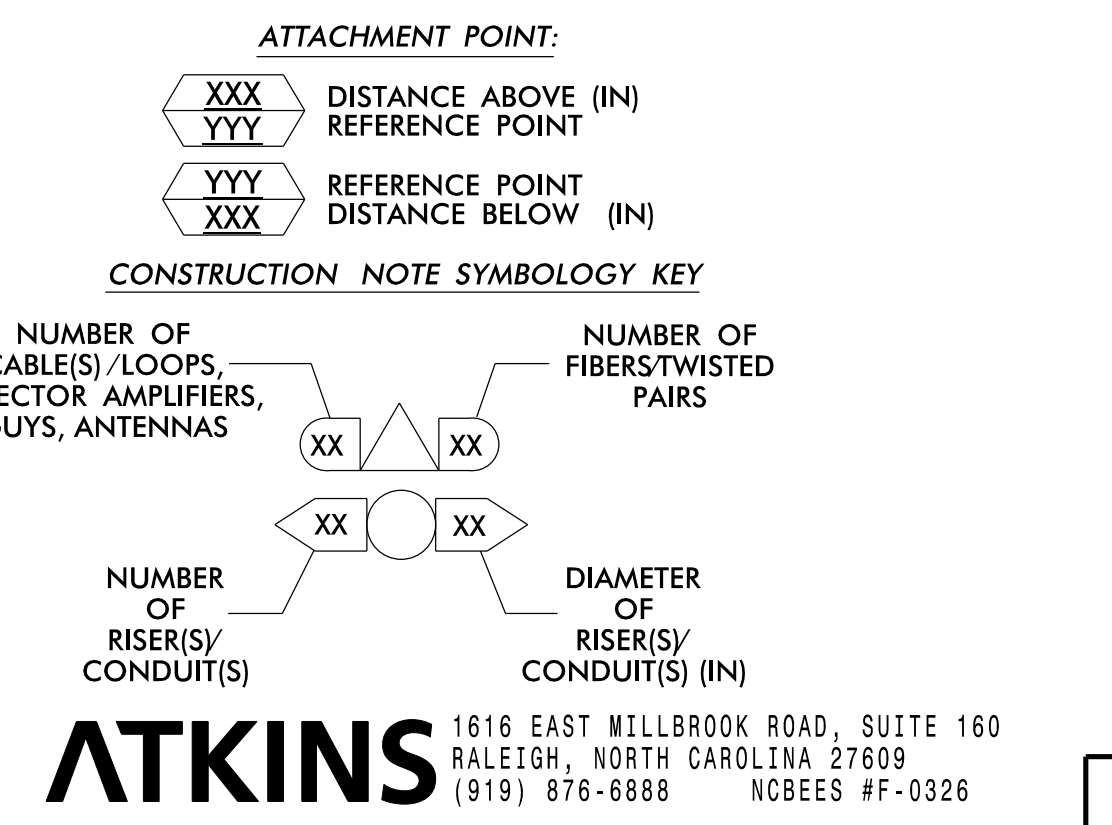
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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ENC05396 AT LUS330048





- NOTES:**
- 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.
  - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
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						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		

*Prepared for the Offices of:*

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS	INIT.	DATE

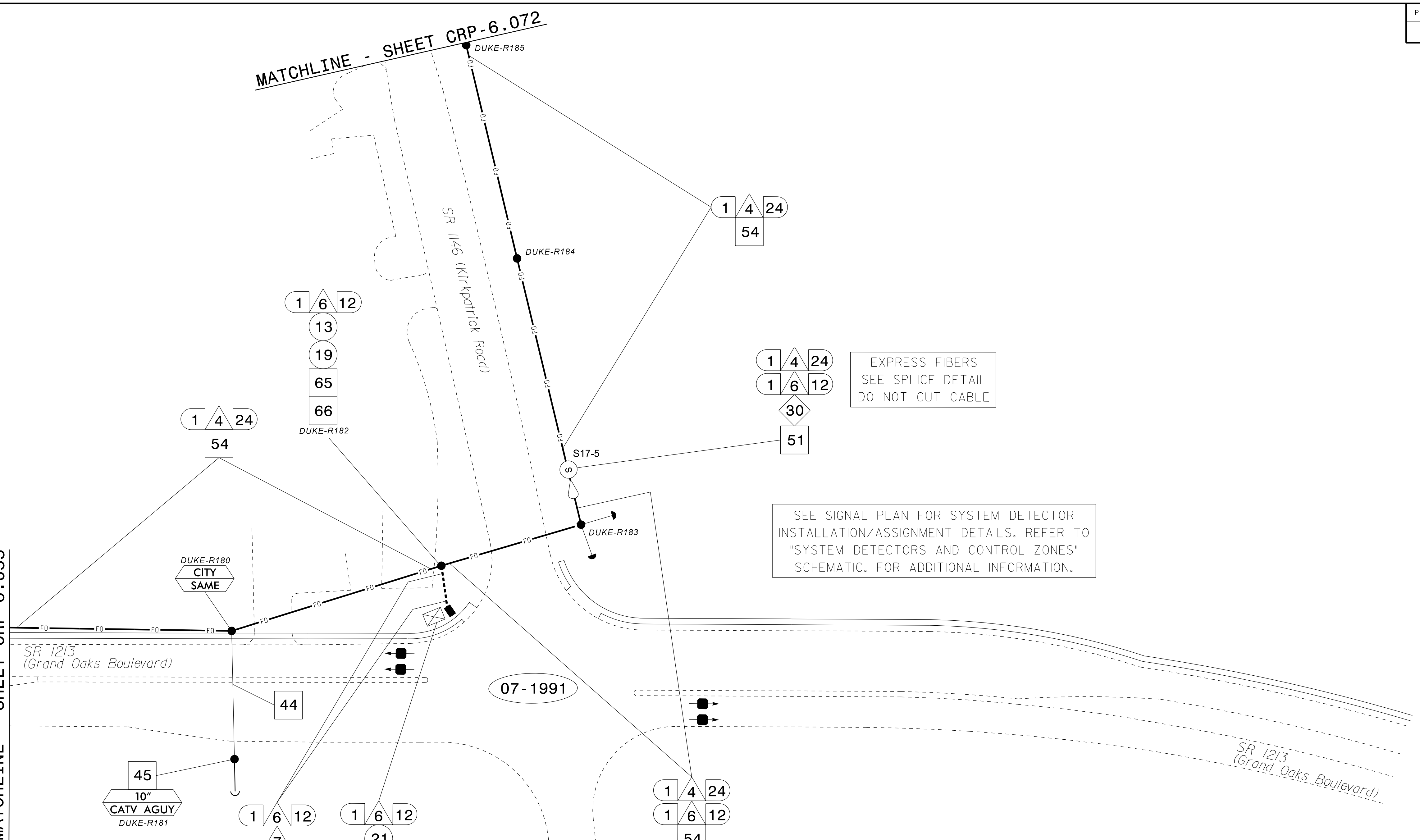
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 ENC45396 AT LUS333048

MATCHLINE - SHEET CRP-6.072

MATCHLINE - SHEET CRP-6.055



EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

SEE SIGNAL PLAN FOR SYSTEM DETECTOR  
INSTALLATION/ASSIGNMENT DETAILS. REFER TO  
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**ATTACHMENT POINT:**

XXX  
YYY DISTANCE ABOVE (IN)  
REFERENCE POINT

YYY  
XXX REFERENCE POINT  
DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLOLOGY KEY**

NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS

NUMBER OF RISER(S) / CONDUIT(S)

NUMBER OF FIBER TWISTED PAIRS

DIAMETER OF RISER(S) / CONDUIT(S) (IN)

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

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Prepared for the Offices of:  

 750 Greenfield Parkway, Garner, NC 27529

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

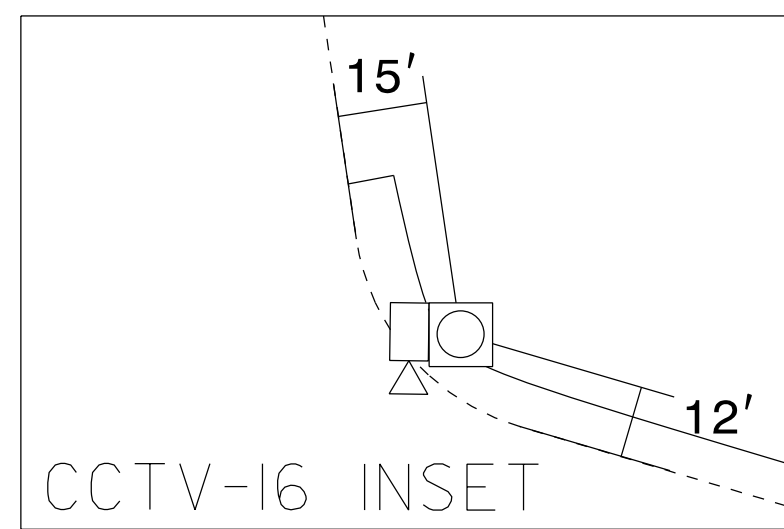
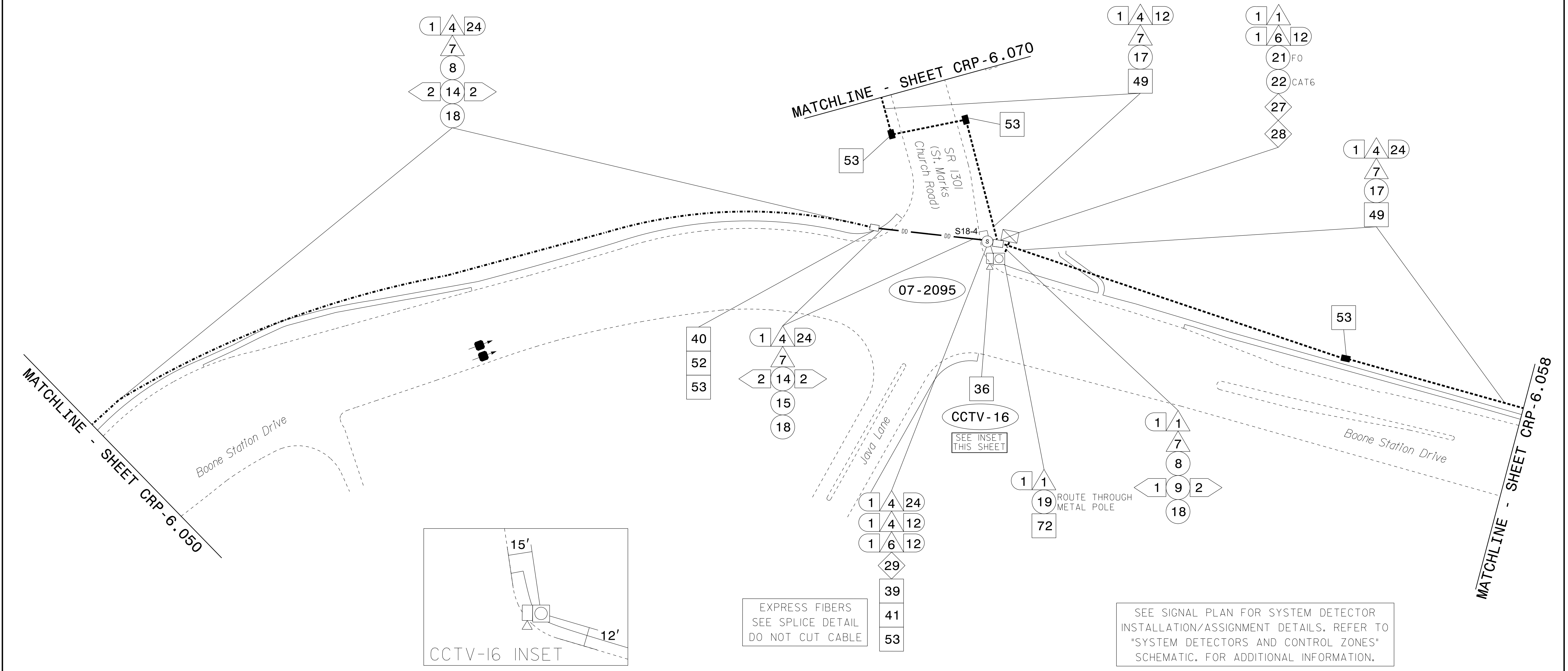
PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

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 NORTH CAROLINA PROFESSIONAL ENGINEER  
 MELISSA B. TOTH  
 025892  
 08/08/2018  
 DATE

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 AT LUS333048



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**ATTACHMENT POINT:**

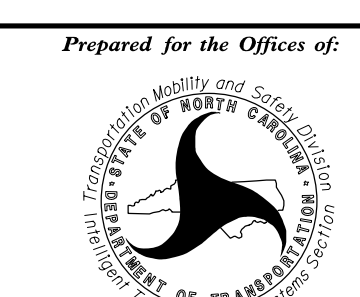
- XXX (triangle above) DISTANCE ABOVE (IN) REFERENCE POINT
- YYY (triangle below) REFERENCE POINT
- YYY (triangle above) DISTANCE BELOW (IN) REFERENCE POINT

**CONSTRUCTION NOTE SYMBOLOLOGY KEY**

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

Prepared for the Offices of:  NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

**Burlington-Graham Signal System Cable Routing Plans**

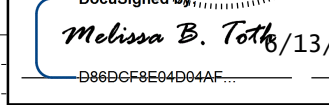
Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

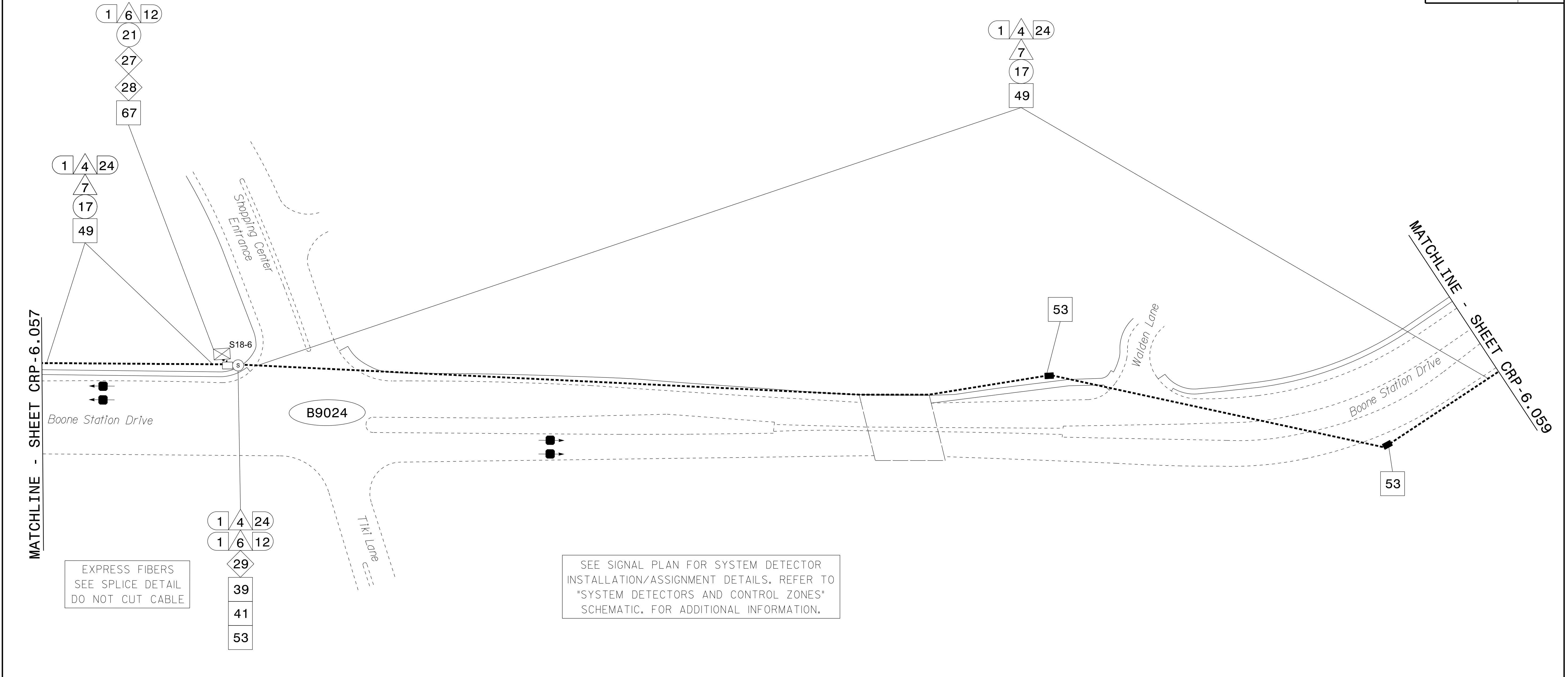
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SCALE: 1"=50'

Documented by:  MELISSA B. TOTH

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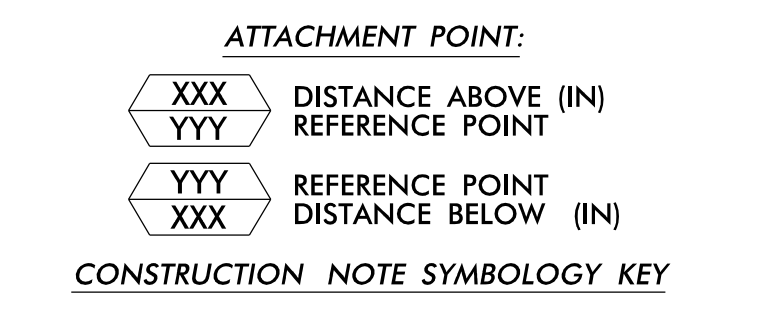
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EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

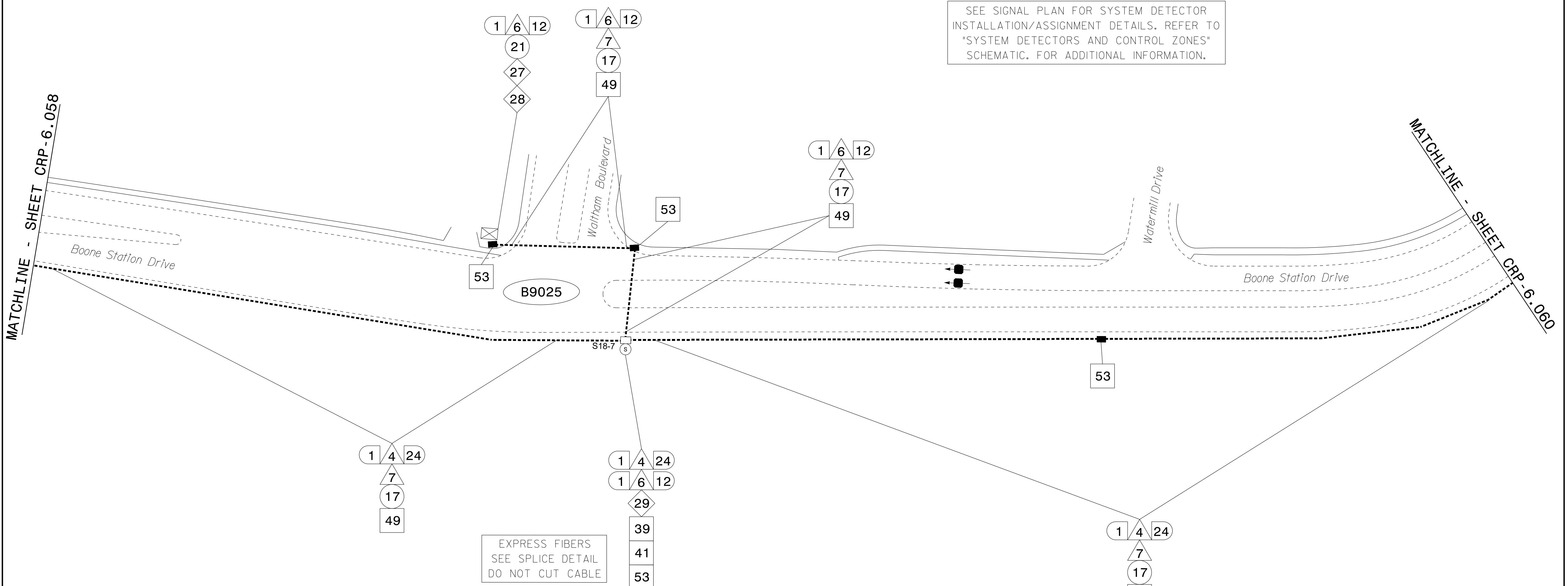
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Melissa B. Toth 11/13/2018

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH

CADD Filename: CL-058.dgn

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SEE SPLICE DETAIL  
DO NOT CUT CABLE

**ATTACHMENT POINT:**

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DIAMETER OF RISER(S) / CONDUIT(S) (IN)

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

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

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

REVISIONS INIT. DATE

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

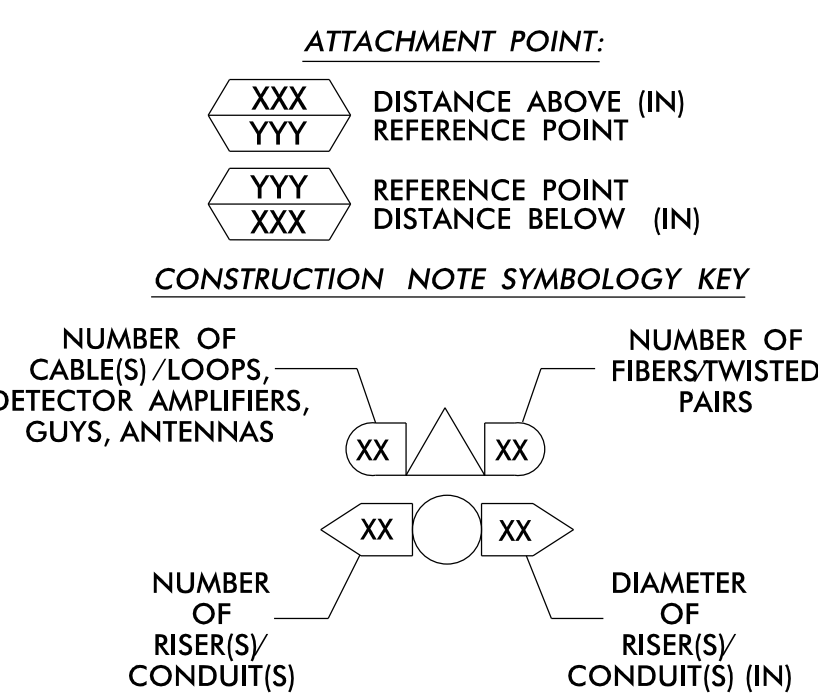
Melissa B. Toth 6/13/2018

CADD File name: CL-059.dgn

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 ENCA5396 AT LUS330048

MATCHLINE - SHEET CRP-6.059

SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.



- 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.

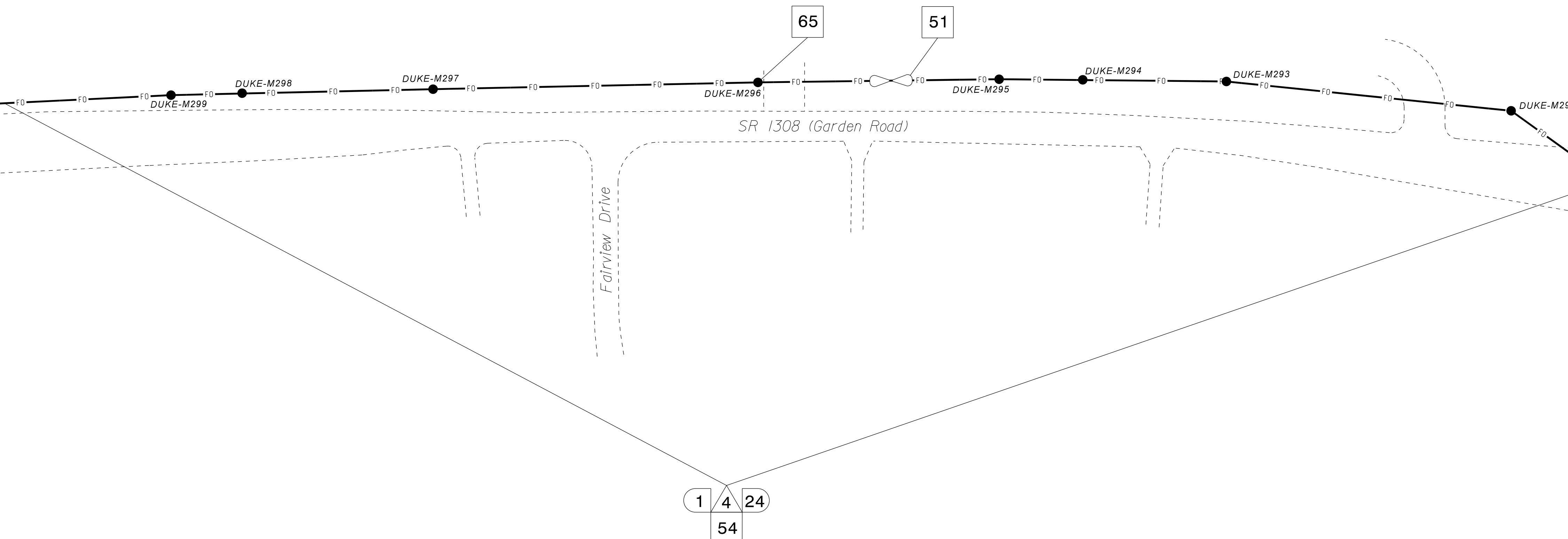
Table with 10 columns of numbered callouts (1-77) and their corresponding descriptions for cable installation, conduit work, and equipment assembly.

ATKINS logo and project information including address (1616 EAST MILLBROOK ROAD, SUITE 160), plan date (June 2018), and a professional seal for Melissa B. Toth.

13-JUN-2018 15:43 01:TC0500PT:101:loc:1:off:ic:curr:\*100056469 U-6015 B-G S:ig Sys\*task 11...CL:ACL-060.dgn

MATCHLINE - SHEET CRP-6.060

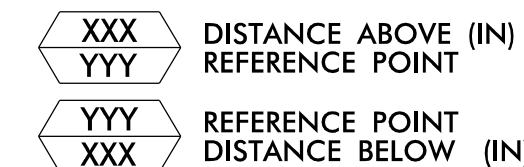
MATCHLINE - SHEET CRP-6.062



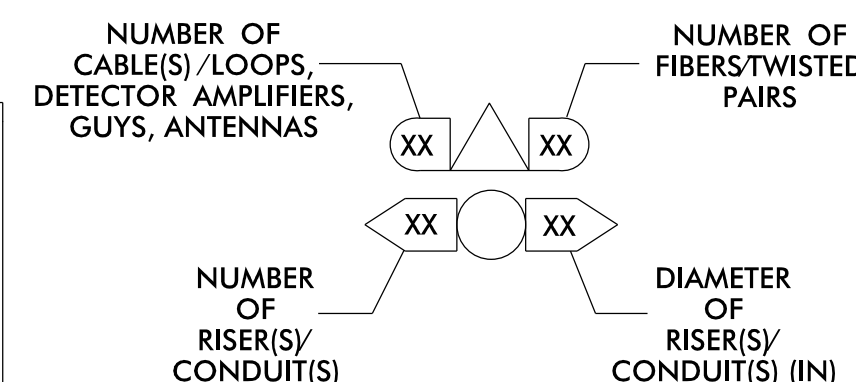
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**ATTACHMENT POINT:**



**CONSTRUCTION NOTE SYMBOLOLOGY KEY**



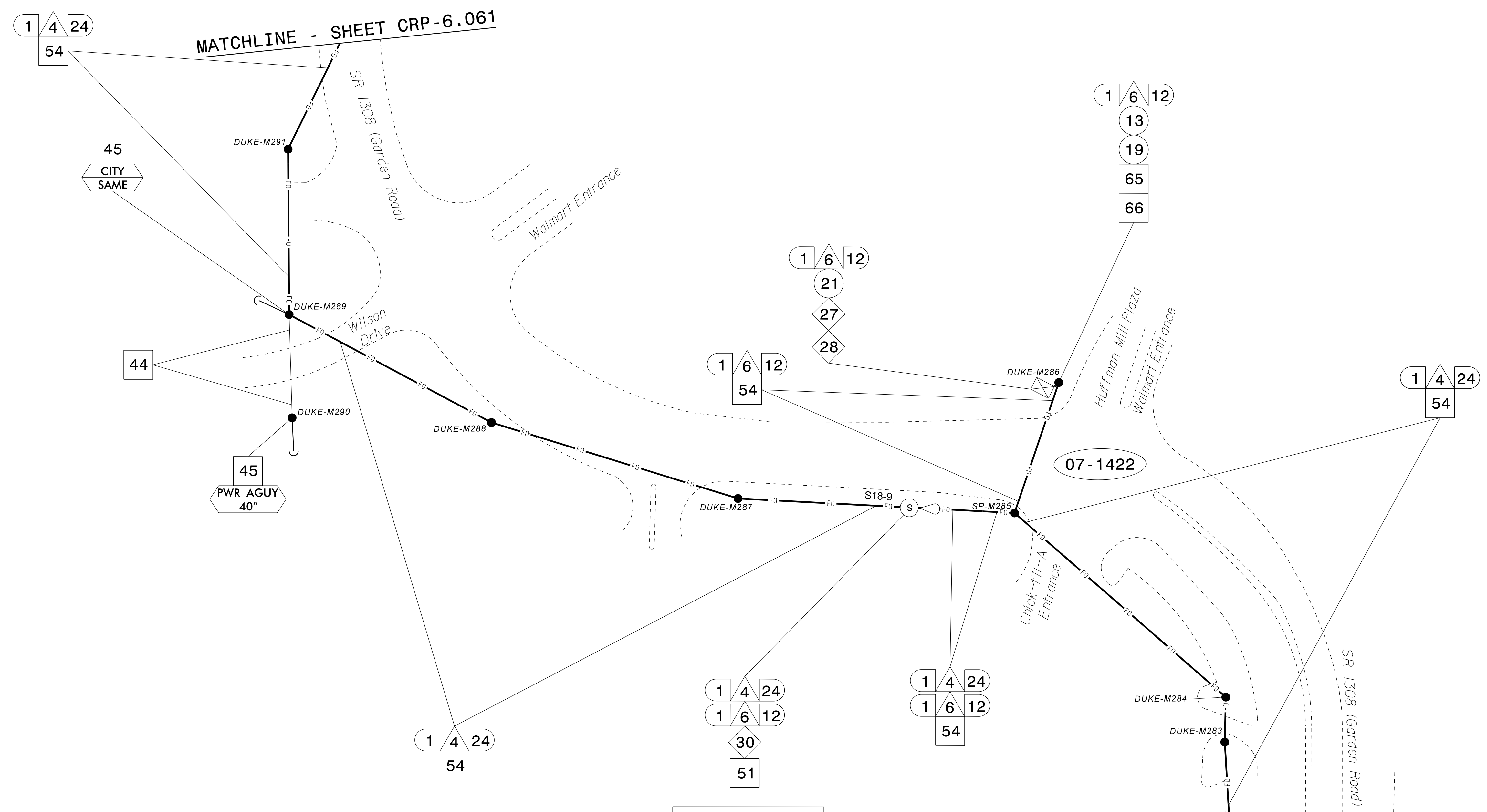
**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 878-6888 NCBEES #F-0326

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

	<b>Burlington-Graham Signal System Cable Routing Plans</b>		
	Division 7 Alamance County PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVISIONS:	Burlington & Graham REVIEWED BY: M B Toth DATE:	
Prepared for the Offices of:			
750 Greenfield Parkway, Garner, NC 27529 SCALE: 1"=50' CADD File name: CL-061.dgn			

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
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3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
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5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
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EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

- NOTES:**
- UNLESS OTHERWISE NOTED:
    - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
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**ATTACHMENT POINT:**

XXX  
YYY DISTANCE ABOVE (IN)  
REFERENCE POINT

YYY  
XXX REFERENCE POINT  
DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLOLOGY KEY**

NUMBER OF CABLE(S)/LOOPS, DETECTOR AMPLIFIERS, GUYS, ANTENNAS

NUMBER OF FIBER/TWISTED PAIRS

NUMBER OF RISER(S)/CONDUIT(S)

DIAMETER OF RISER(S)/CONDUIT(S) (IN)

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		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
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**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

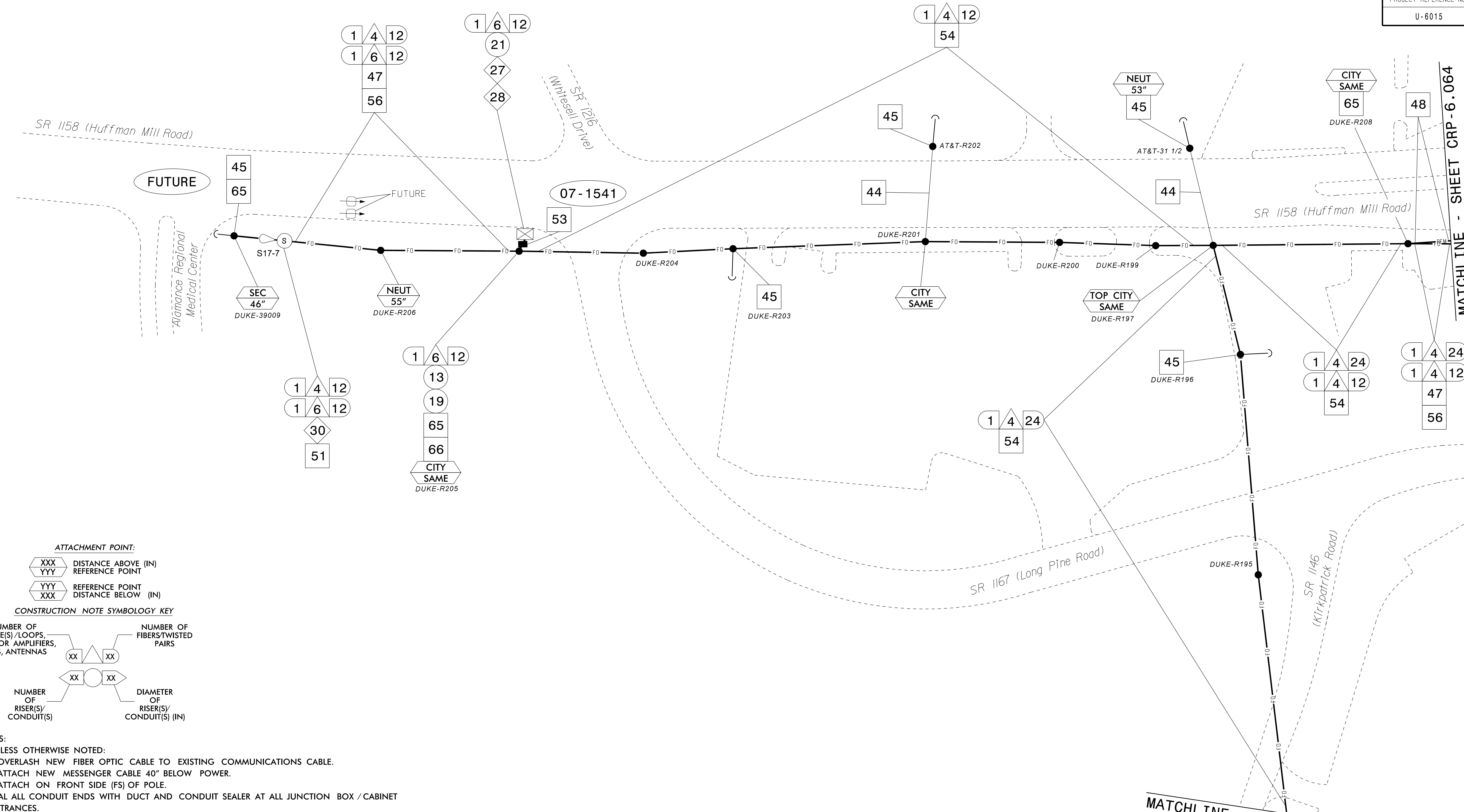
Melissa B. Toth 1/13/2018

DATE

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ENC45386 AT LUS330048





**ATTACHMENT POINT:**

XXX DISTANCE ABOVE (IN)  
YYY REFERENCE POINT

YYY REFERENCE POINT  
XXX DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLOLOGY KEY**

NUMBER OF CABLE(S)/LOOPS, DETECTOR AMPLIFIERS, GUYS, ANTENNAS: XX

NUMBER OF FIBERS/TWISTED PAIRS: XX

NUMBER OF RISER(S)/CONDUIT(S): XX

DIAMETER OF RISER(S)/CONDUIT(S) (IN): XX

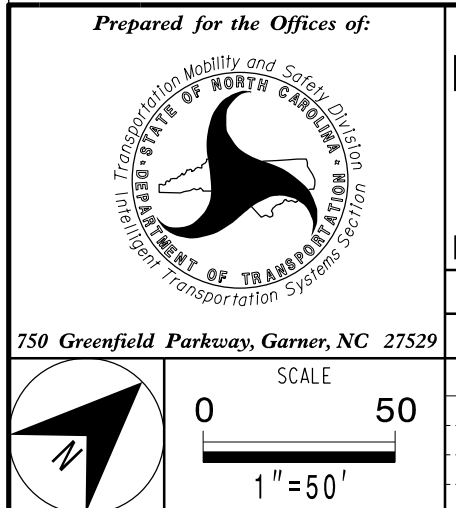
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MATCHLINE - SHEET CRP-6.072

**ATKINS**

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



**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 RALEIGH, NORTH CAROLINA 27609

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

REVISIONS: INIT. DATE

SCALE: 1"=50'

DATE: 11/13/2018

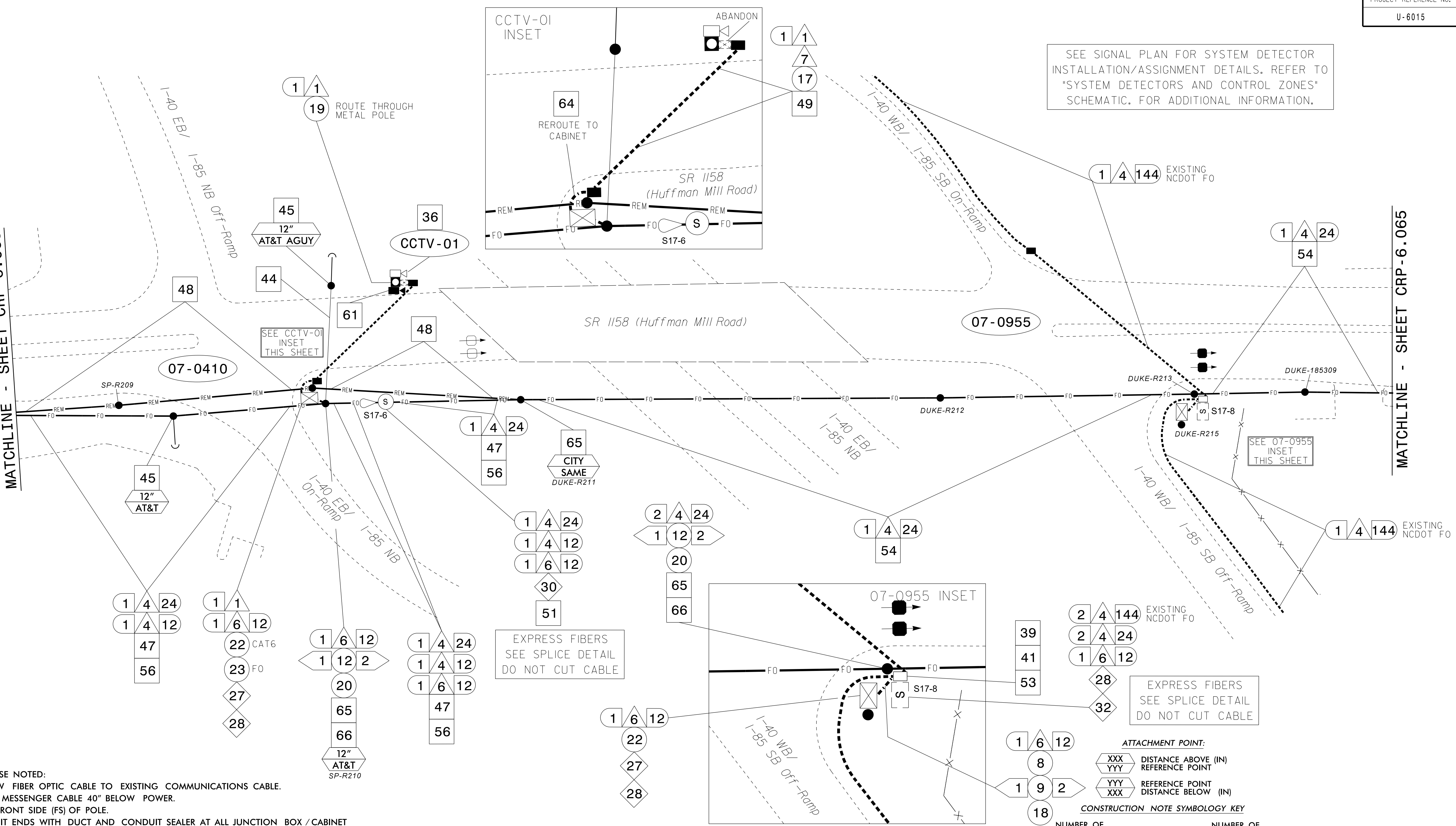
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ENC45386 AT LUS330048

SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

MATCHLINE - SHEET CRP-6.063

MATCHLINE - SHEET CRP-6.065



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- CONSTRUCTION NOTE SYMBOLOLOGY KEY**

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2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB/ CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
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9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-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 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 878-6888 NCBEES #F-0326

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018  
PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth  
REVISIONS: \_\_\_\_\_ INIT.: \_\_\_\_\_ DATE: \_\_\_\_\_

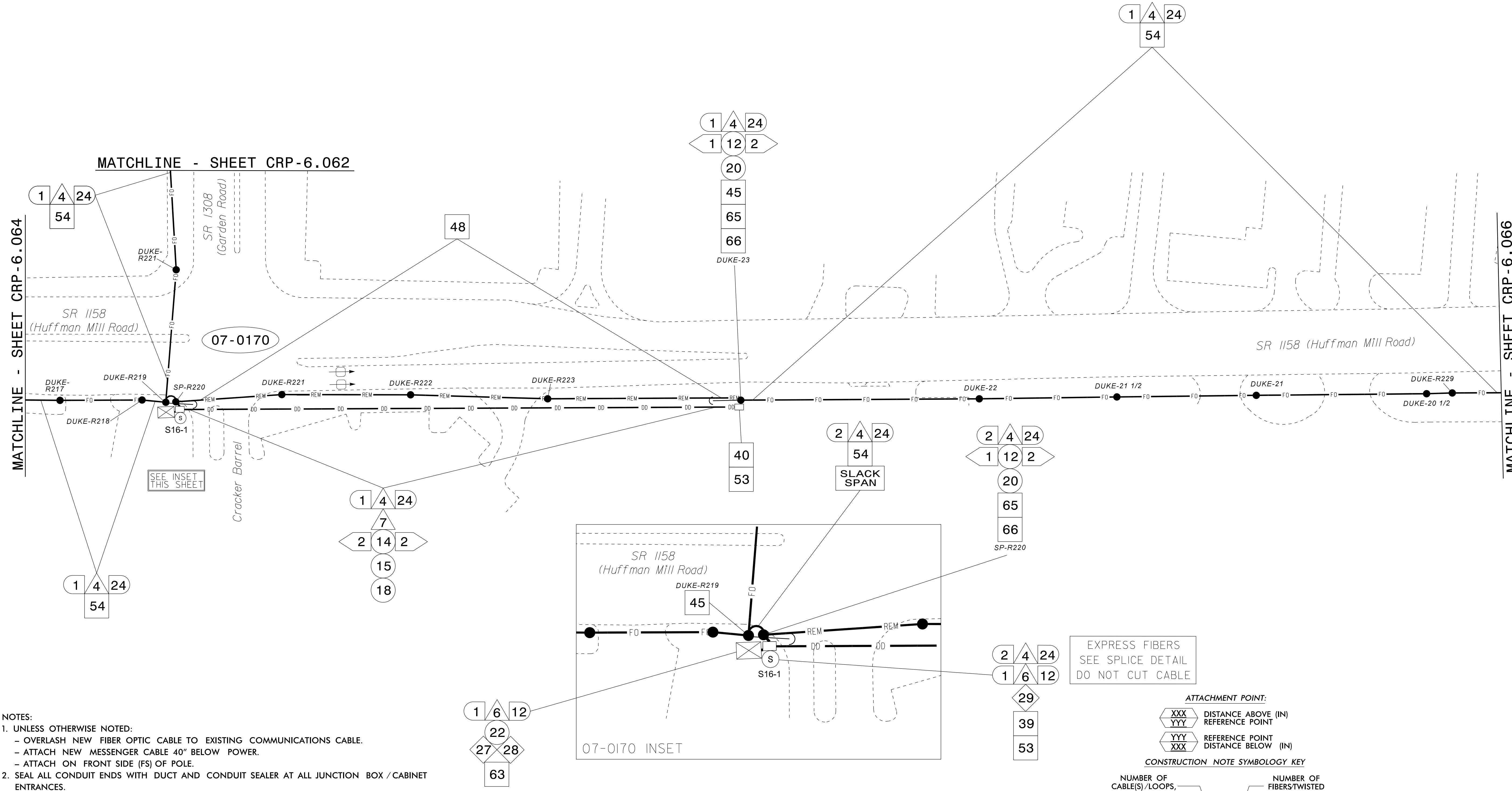
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SCALE: 0 50 1"=50'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
MELISSA B. TOOTH  
025892  
Melissa B. Toth 6/13/2018  
DATE

CADD File name: CL-064.dgn

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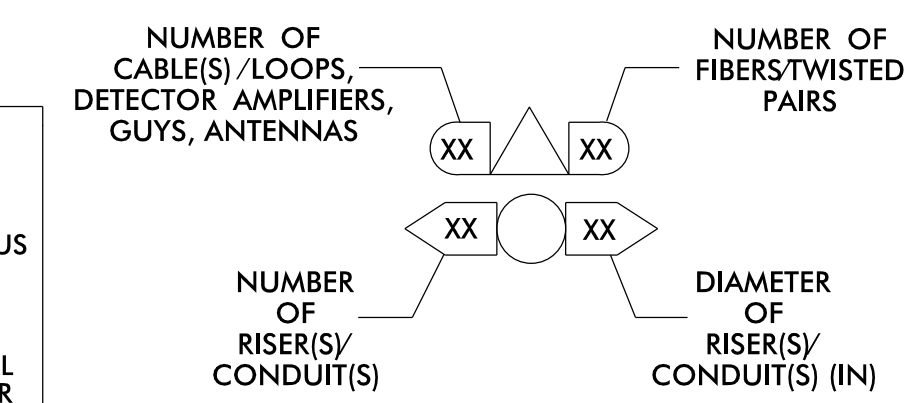


**NOTES:**  
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 2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

EXPRESS FIBERS  
 SEE SPLICE DETAIL  
 DO NOT CUT CABLE

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

**CONSTRUCTION NOTE SYMBOLGY KEY**



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

Prepared for the Offices of:  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Division 7 Alamance County Burlington & Graham

**Burlington-Graham Signal System Cable Routing Plans**

PLAN DATE: June 2018 REVIEWED BY: M B Toth  
 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529  
 SCALE 0 50 1"=50'

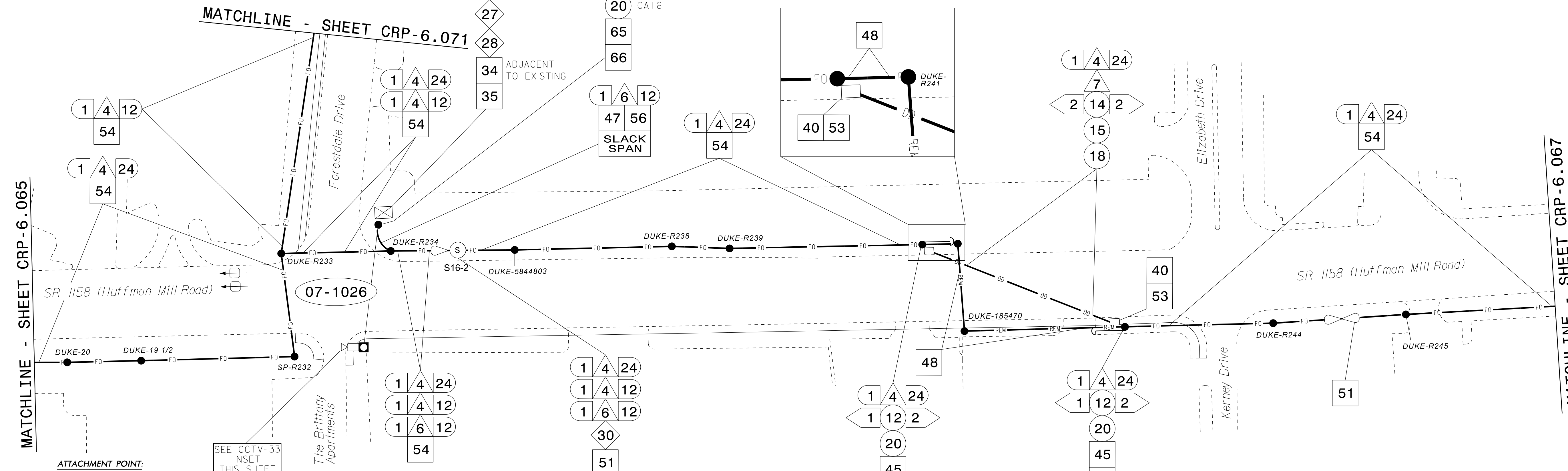
REVISIONS INIT. DATE

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 MELISSA B. TOOTH  
 025892  
 13/2018  
 DATE

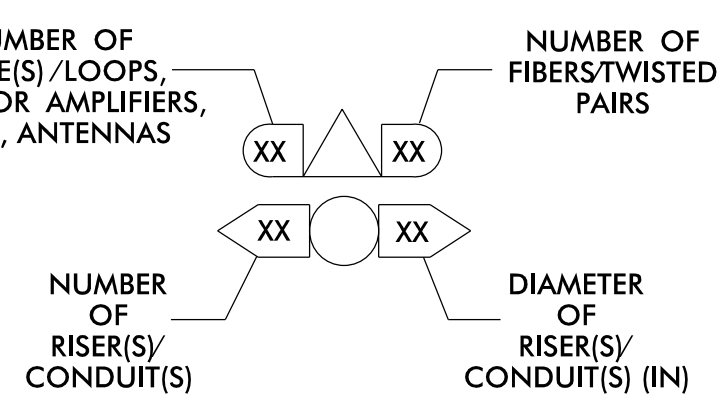
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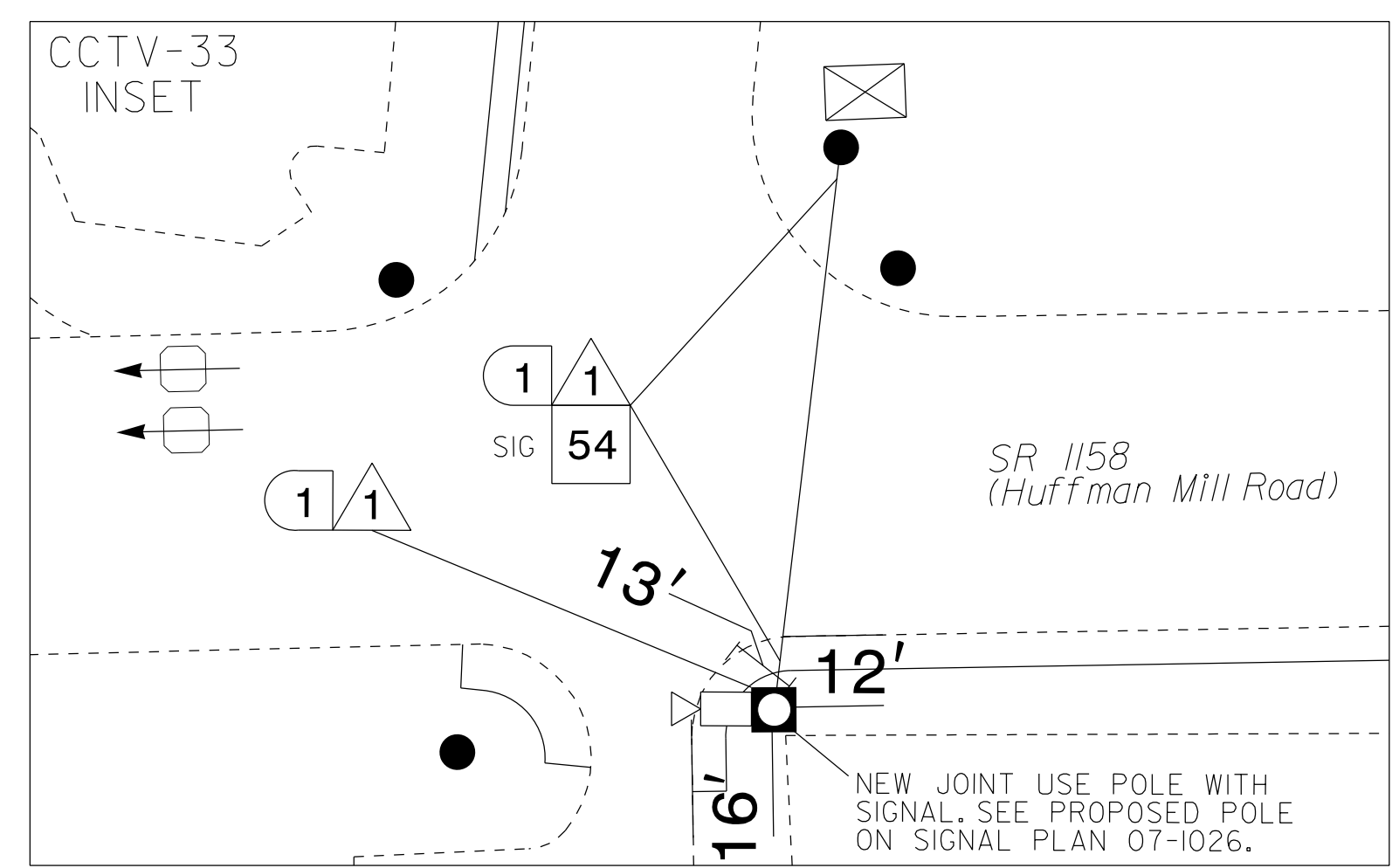


ATTACHMENT POINT:  
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YYY REFERENCE POINT DISTANCE BELOW (IN)  
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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

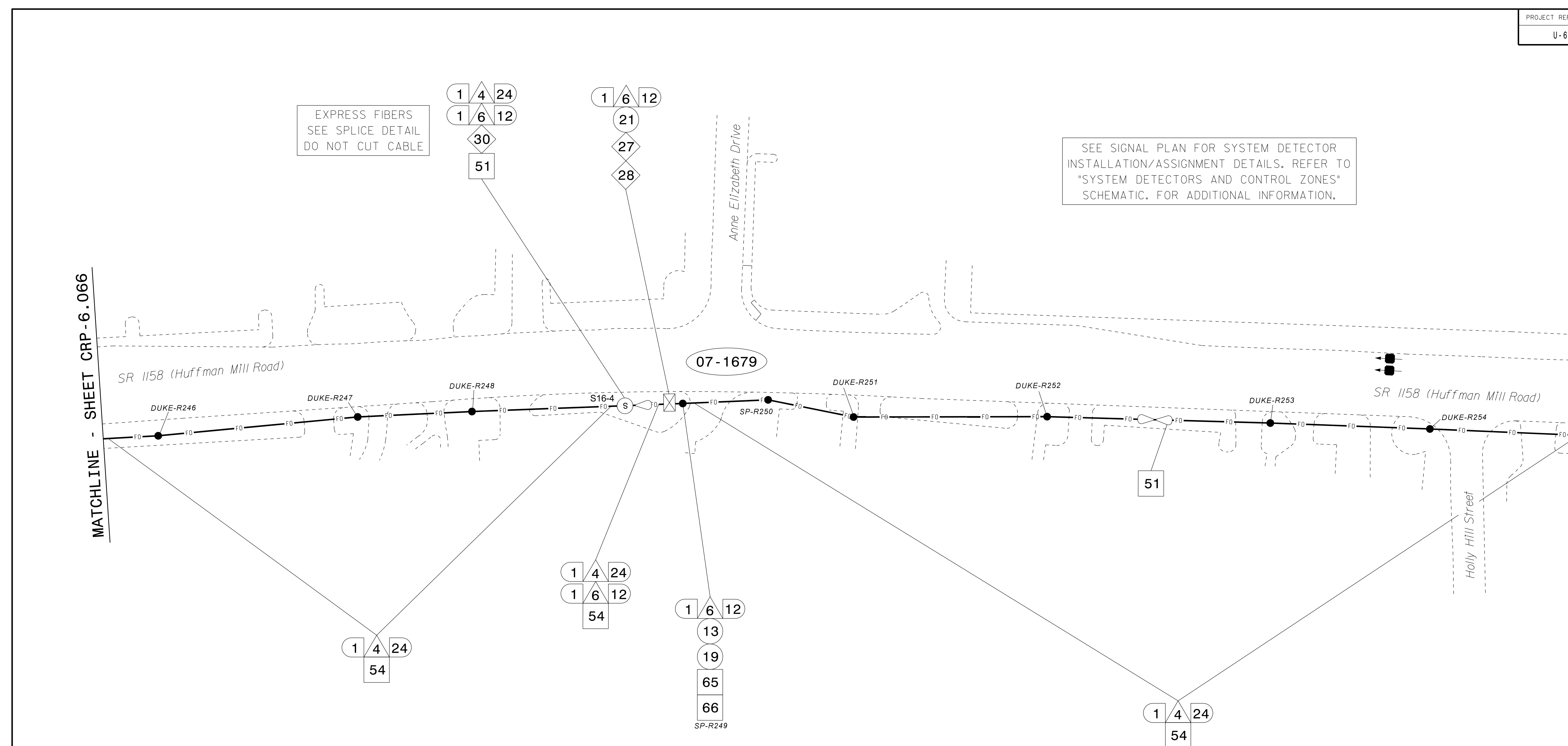
750 Greenfield Parkway, Garner, NC 27529

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 11/13/2018

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EXPRESS FIBERS  
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DO NOT CUT CABLE

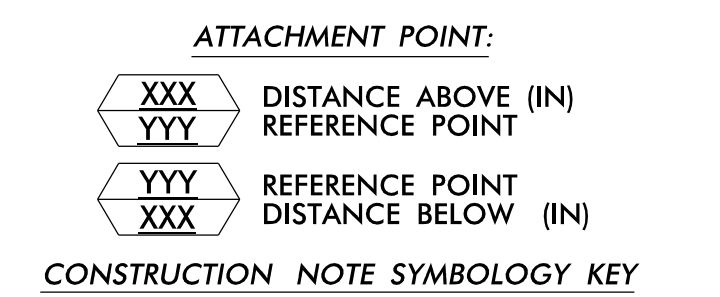
SEE SIGNAL PLAN FOR SYSTEM DETECTOR  
INSTALLATION/ASSIGNMENT DETAILS. REFER TO  
"SYSTEM DETECTORS AND CONTROL ZONES"  
SCHEMATIC. FOR ADDITIONAL INFORMATION.

MATCHLINE - SHEET CRP-6.066

MATCHLINE - SHEET CRP-6.068

**NOTES:**

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Division 7 Alamance County

**Burlington-Graham Signal System Cable Routing Plans**

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PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

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SCALE: 1"=50'

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

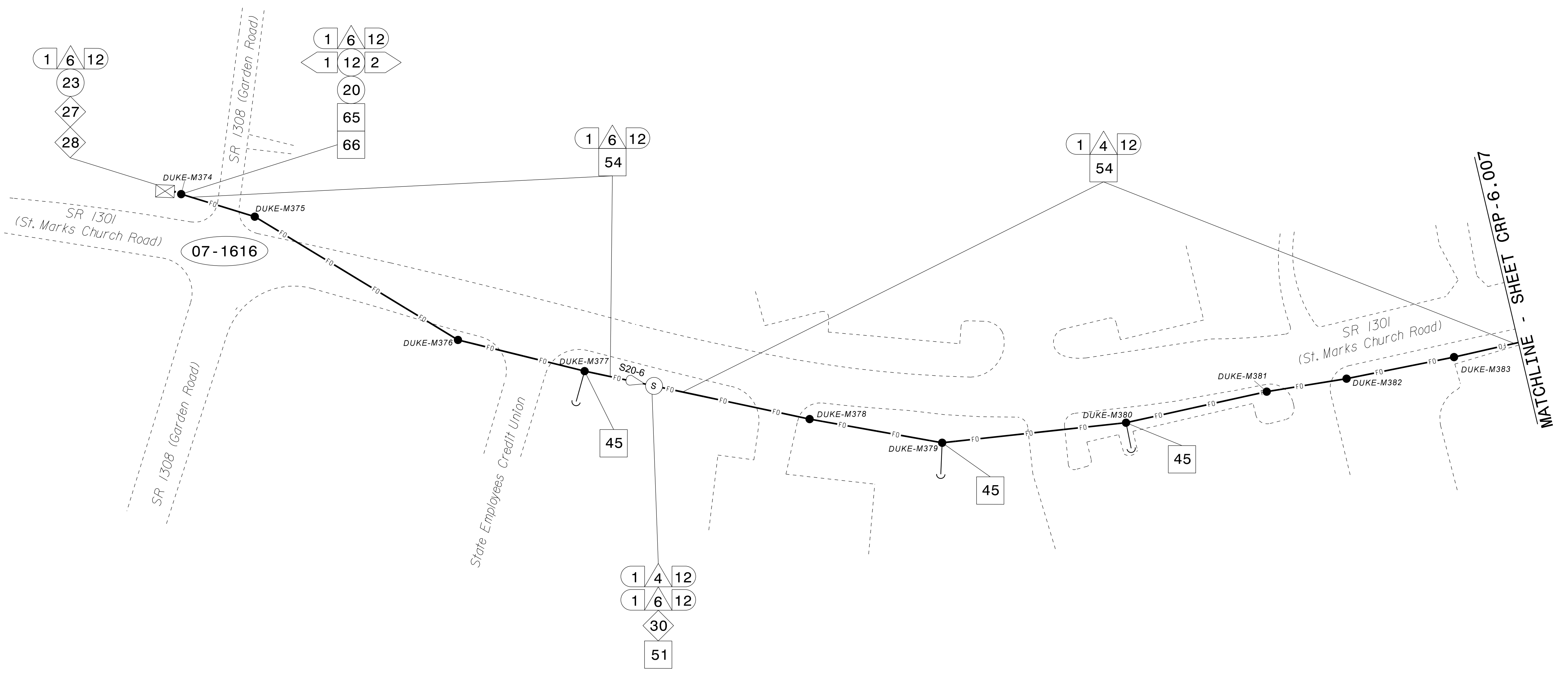
SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
MELISSA B. TOOTH  
025892  
Melissa B. Toth 11/13/2018  
DATE: \_\_\_\_\_

Seal of Melissa B. Toth, Engineer No. 025892.

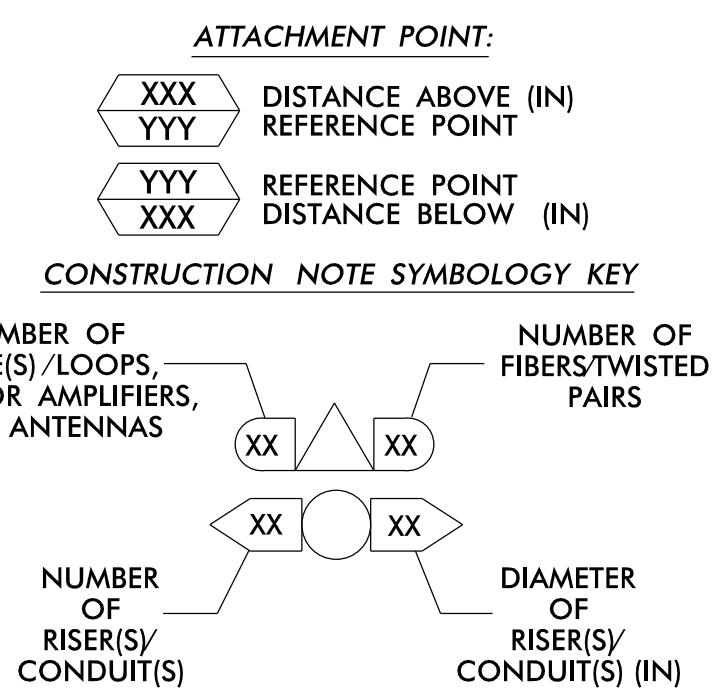
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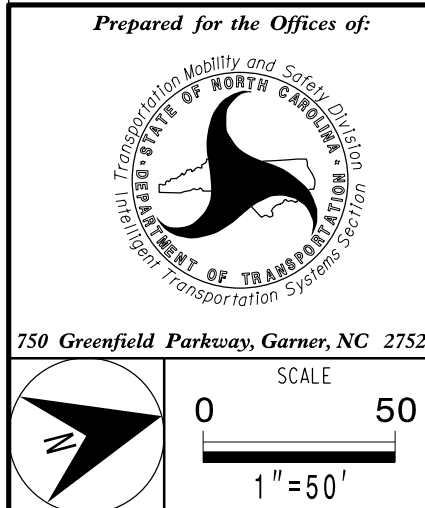
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|--|--|--|--|---|--|--|
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| 2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)  | 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING | 23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE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

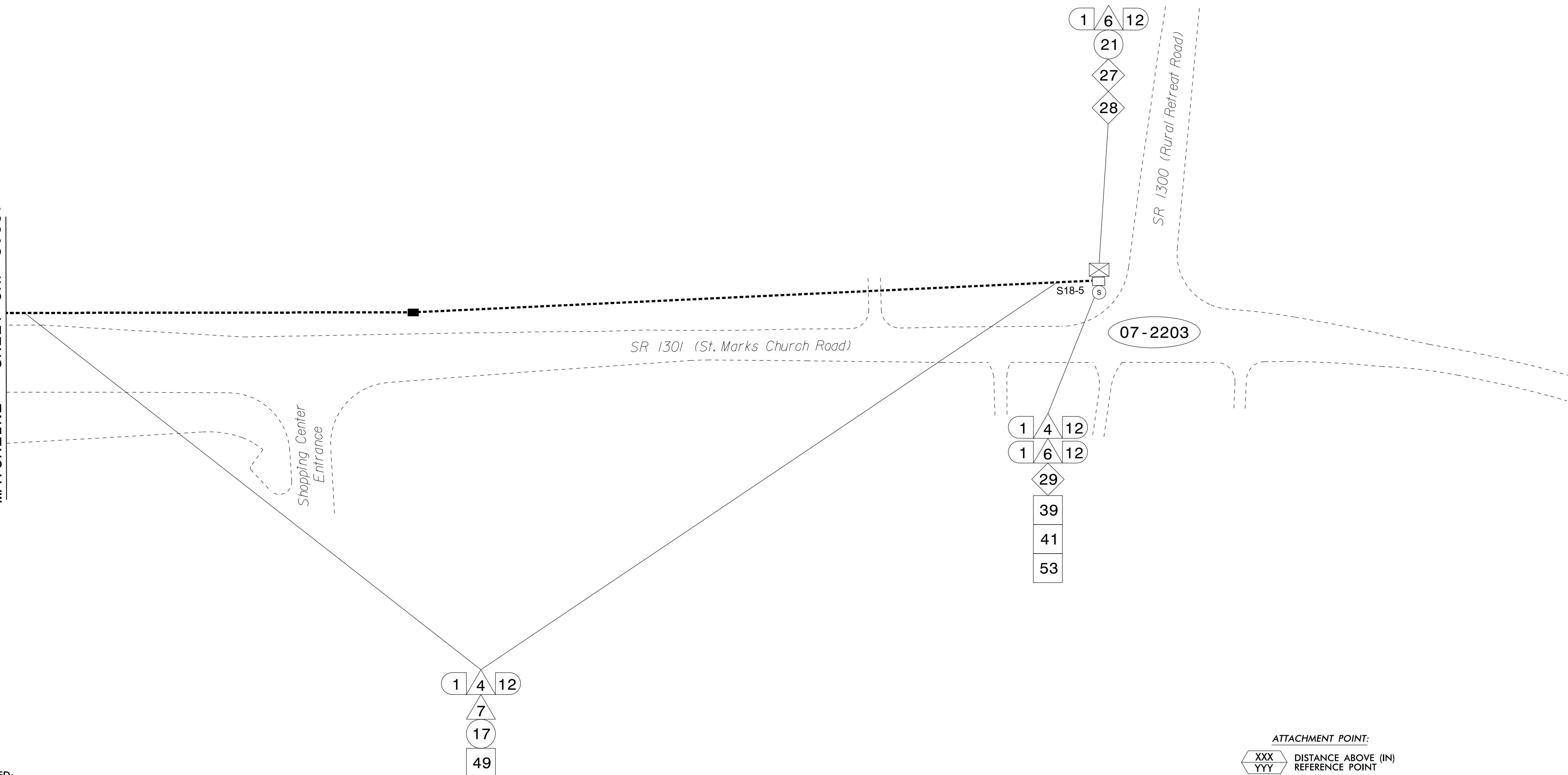


**Burlington-Graham Signal System Cable Routing Plans**  
 Division 7 Alamance County Burlington & Graham  
 PLAN DATE: June 2018 REVIEWED BY: M B Toth  
 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

**Melissa B. Toth**  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 025892  
 DATE 11/13/2018

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MATCHLINE - SHEET CRP-6.057



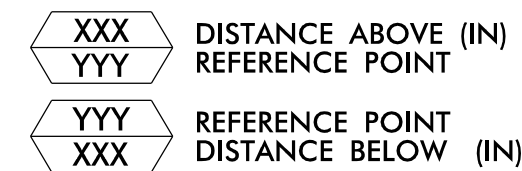
**NOTES:**

1. UNLESS OTHERWISE NOTED:

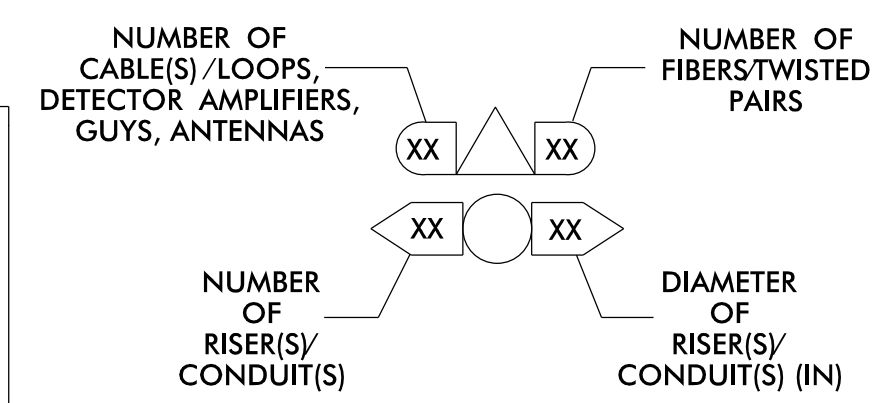
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.

2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

**ATTACHMENT POINT:**



**CONSTRUCTION NOTE SYMBOLY KEY**



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

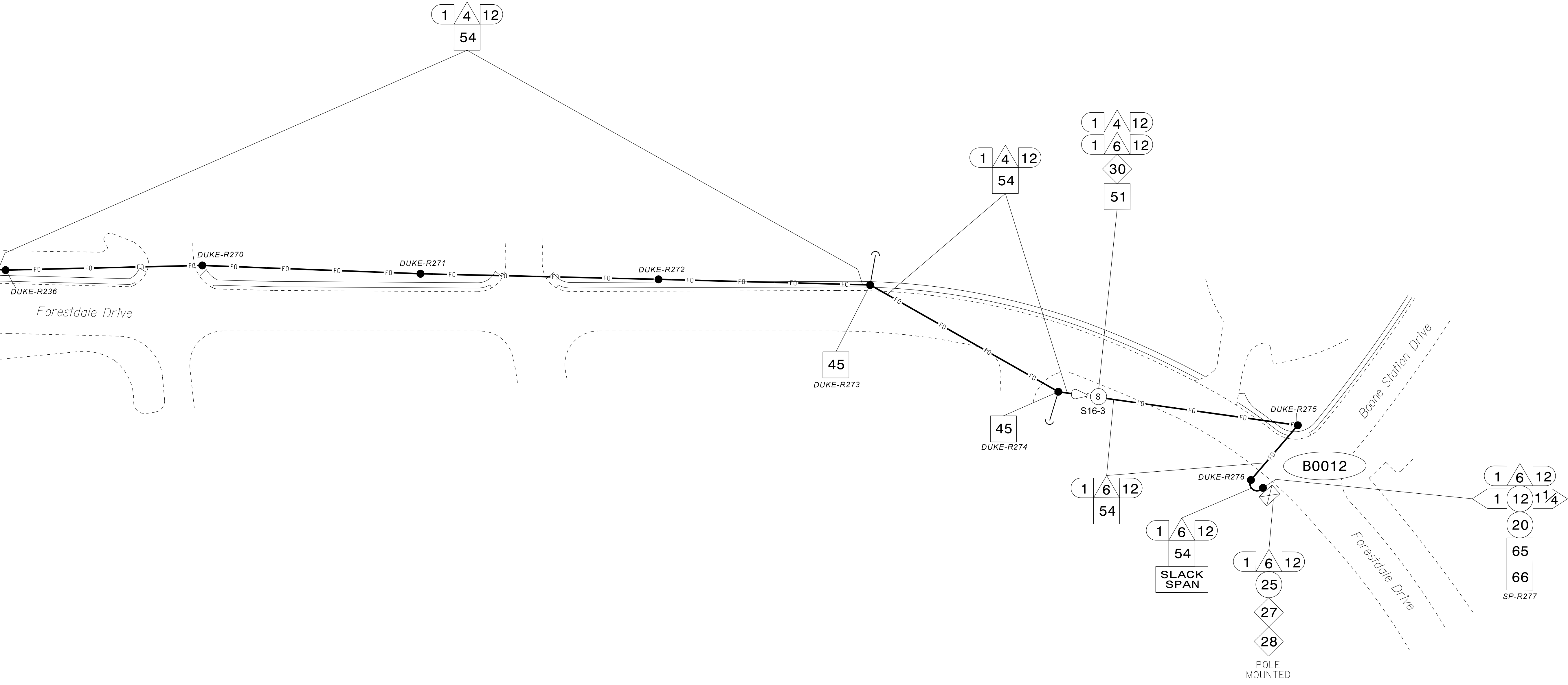
**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-8888 NCBEES #F-0326

	<b>Burlington-Graham Signal System Cable Routing Plans</b>		
	Division 7 Alamance County Burlington & Graham		
PLAN DATE: June 2018		REVIEWED BY: M B Toth	
PREPARED BY: AME/AJH/VJP/NAP/JAW		REVIEWED BY: BJ Slocum	
REVISIONS		INIT. DATE	
SCALE 0 50 1"=50'		DATE	
CADD File name: CL-070.dgn			

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 ENC45396 AT LUS33048



MATCHLINE - SHEET CRP-6.066



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.

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

CONSTRUCTION NOTE SYMBOLOLOGY KEY  
NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS  
NUMBER OF RISER(S) / CONDUIT(S)  
NUMBER OF FIBER/TWISTED PAIRS  
DIAMETER OF RISER(S) / CONDUIT(S) (IN)

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
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4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
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		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64	INTERCEPT AND REROUTE EXISTING CONDUITS	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65	BOND MESSENGER TO POLE GROUND	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

**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

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

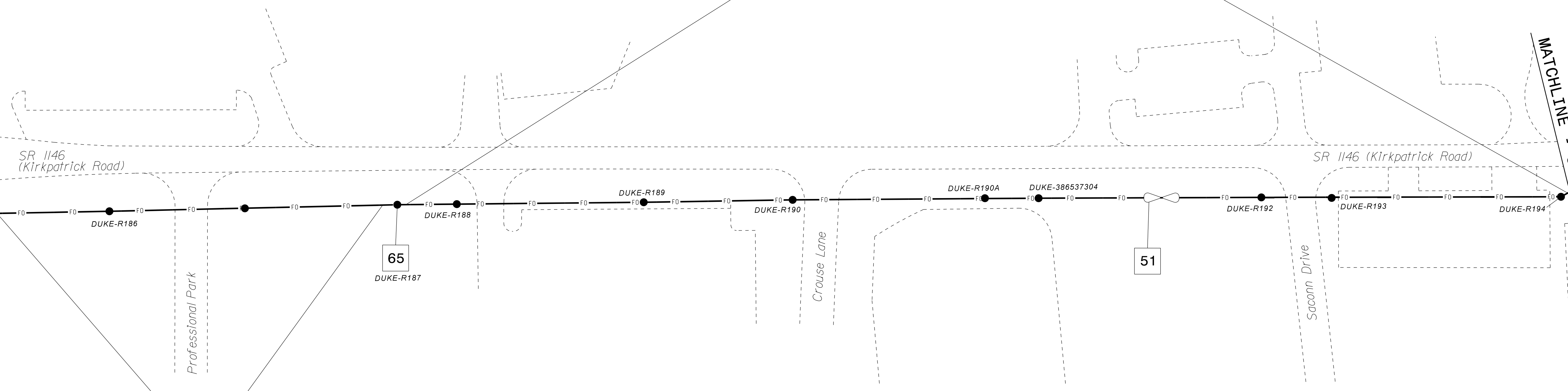
Melissa B. Toth 1/13/2018

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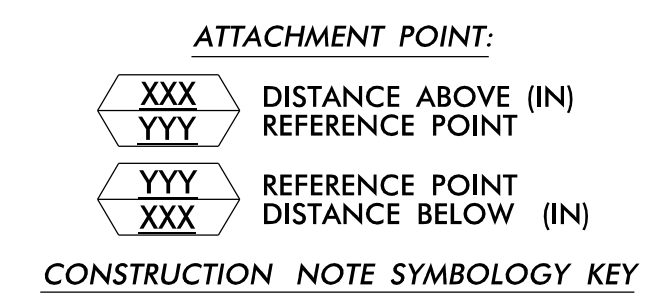
MATCHLINE - SHEET CRP-6.056

MATCHLINE - SHEET CRP-6.063



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54

- NOTES:**
- UNLESS OTHERWISE NOTED:
    - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
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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**

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529

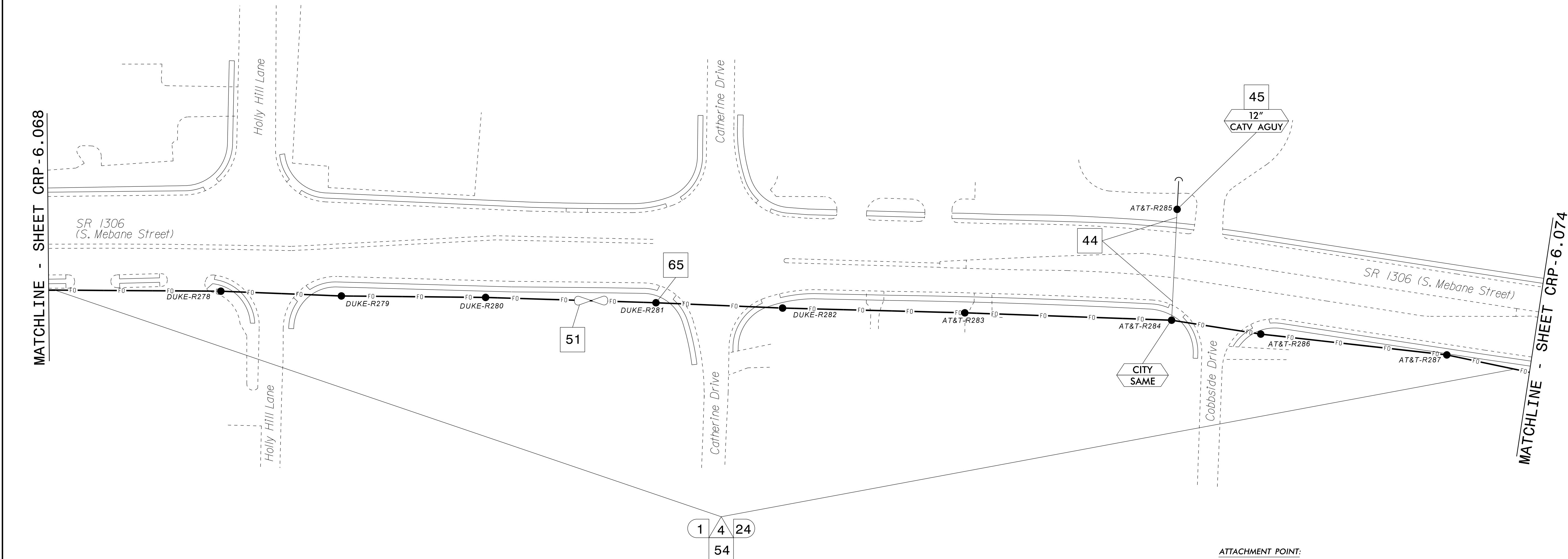
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SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

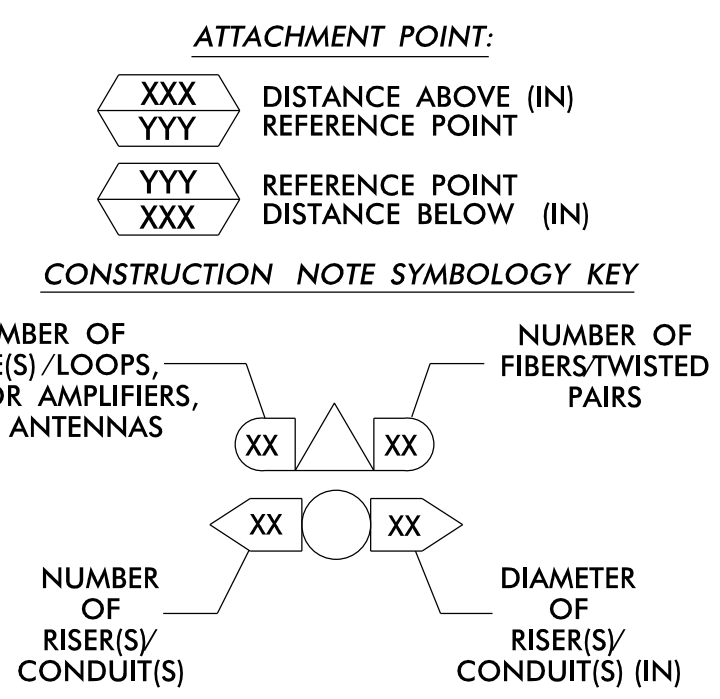
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ENC45396 AT LUS330048



**NOTES:**

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

Prepared for the Offices of:

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

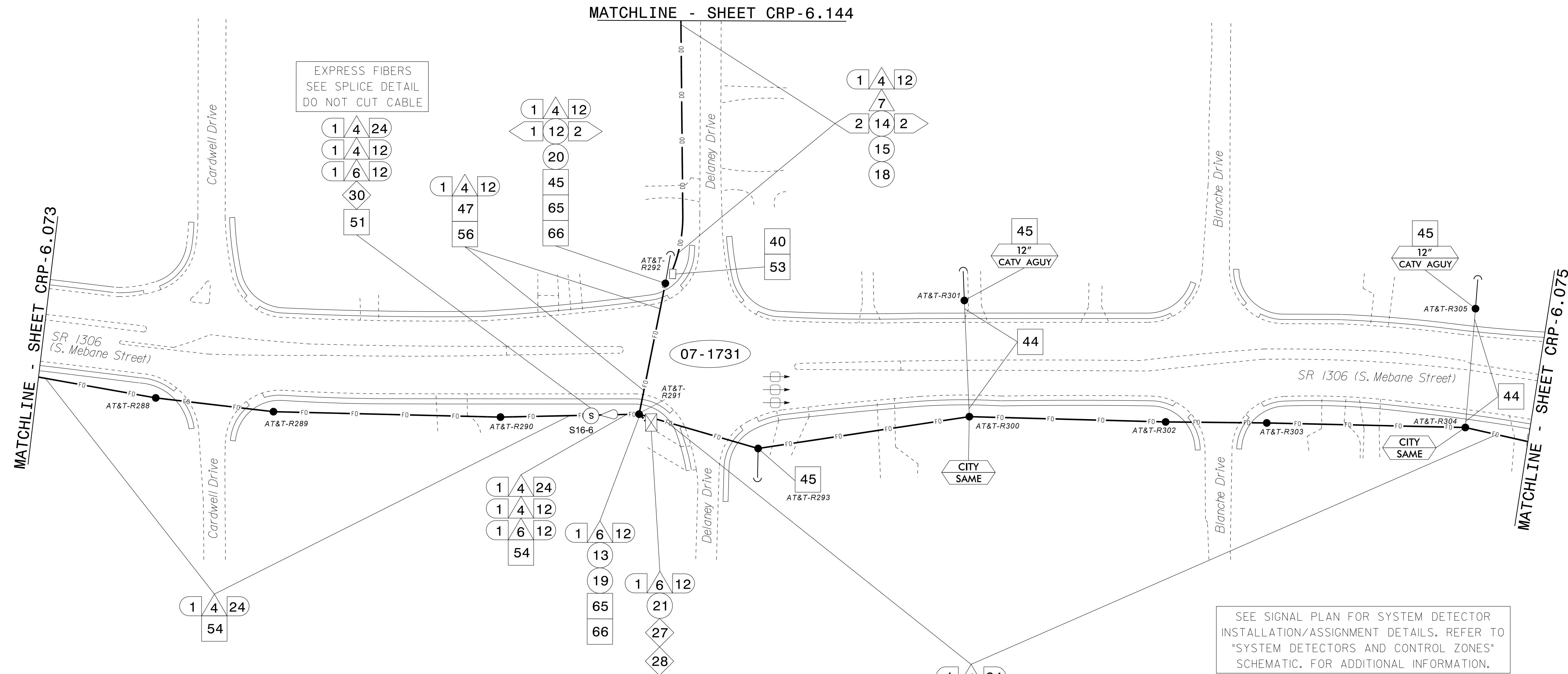
PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE: 1"=50'

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 MELISSA B. TOOTH  
 025892  
 11/13/2018  
 CL-073.dgn

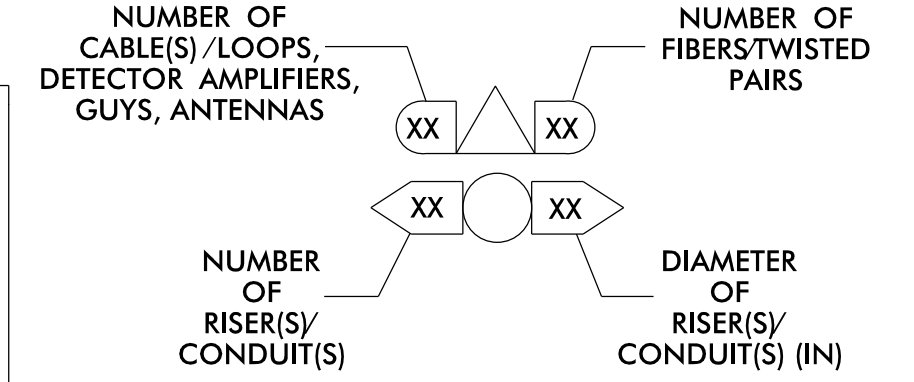
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SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

**ATTACHMENT POINT:**  
 XXX DISTANCE ABOVE (IN) REFERENCE POINT  
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**CONSTRUCTION NOTE SYMBOLOLOGY KEY**



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Prepared for the Offices of:  

 NORTH CAROLINA PROFESSIONAL ENGINEER  
 MELISSA B. TOOTH  
 025892  
 13/2018

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

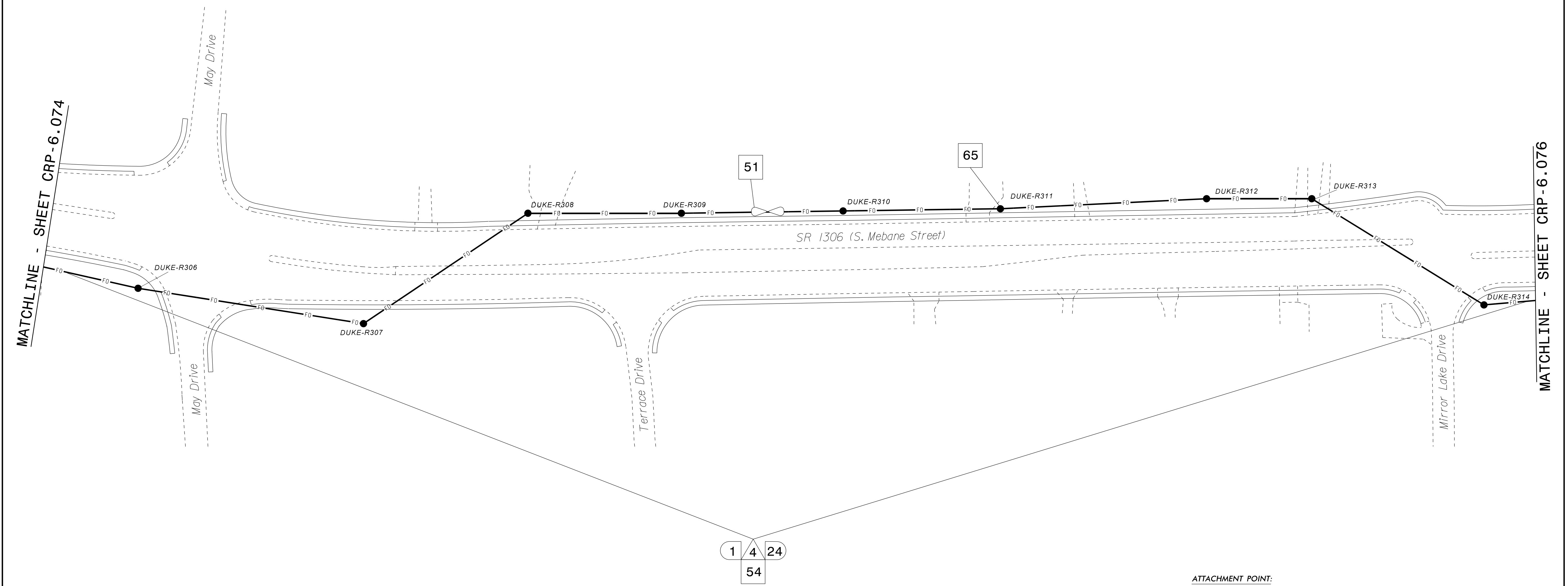
PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

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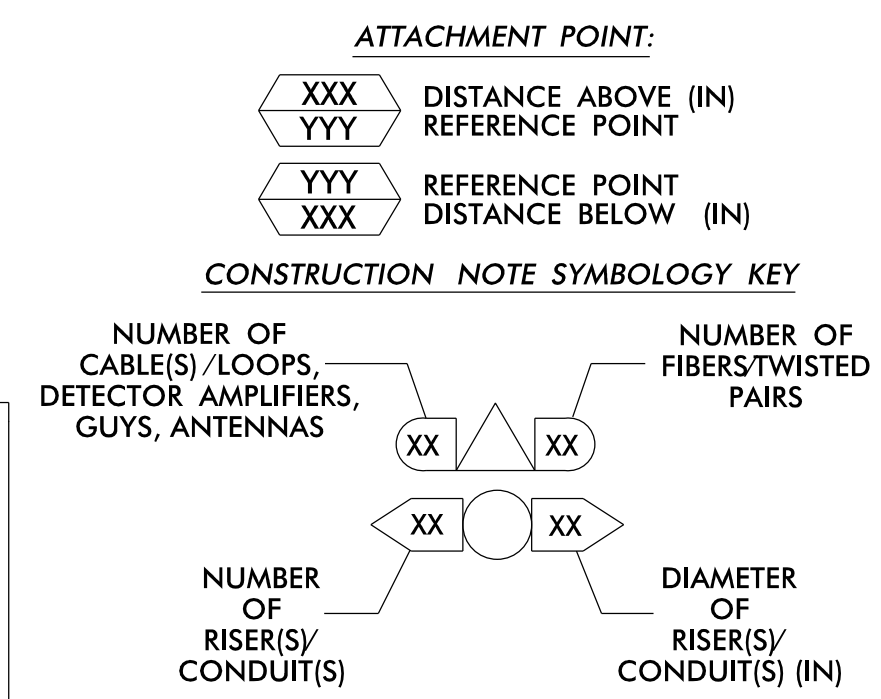
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 ENCA5396 AT LUS333048



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Prepared for the Offices of:  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Transportation Systems Division

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529

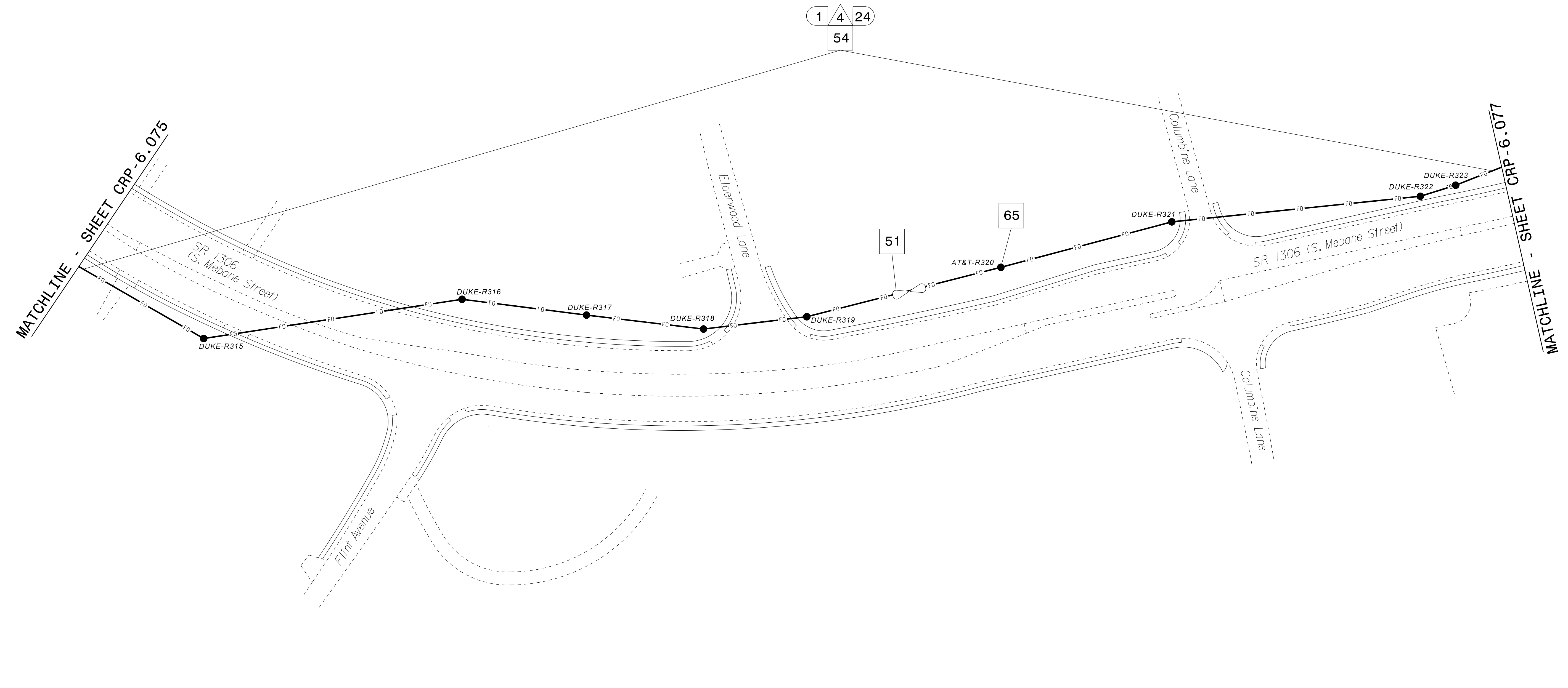
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REVISIONS: INIT. DATE

Melissa B. Toth, 1/13/2018  
 025892  
 MELISSA B. TOTH  
 ENGINEER  
 NORTH CAROLINA PROFESSIONAL SEAL

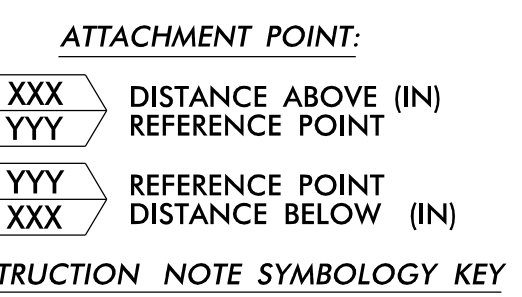
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 ENCA5396 AT LUS330048



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Division 7 Alamance County		Burlington & Graham	
PLAN DATE: June 2018		REVIEWED BY: M B Toth	
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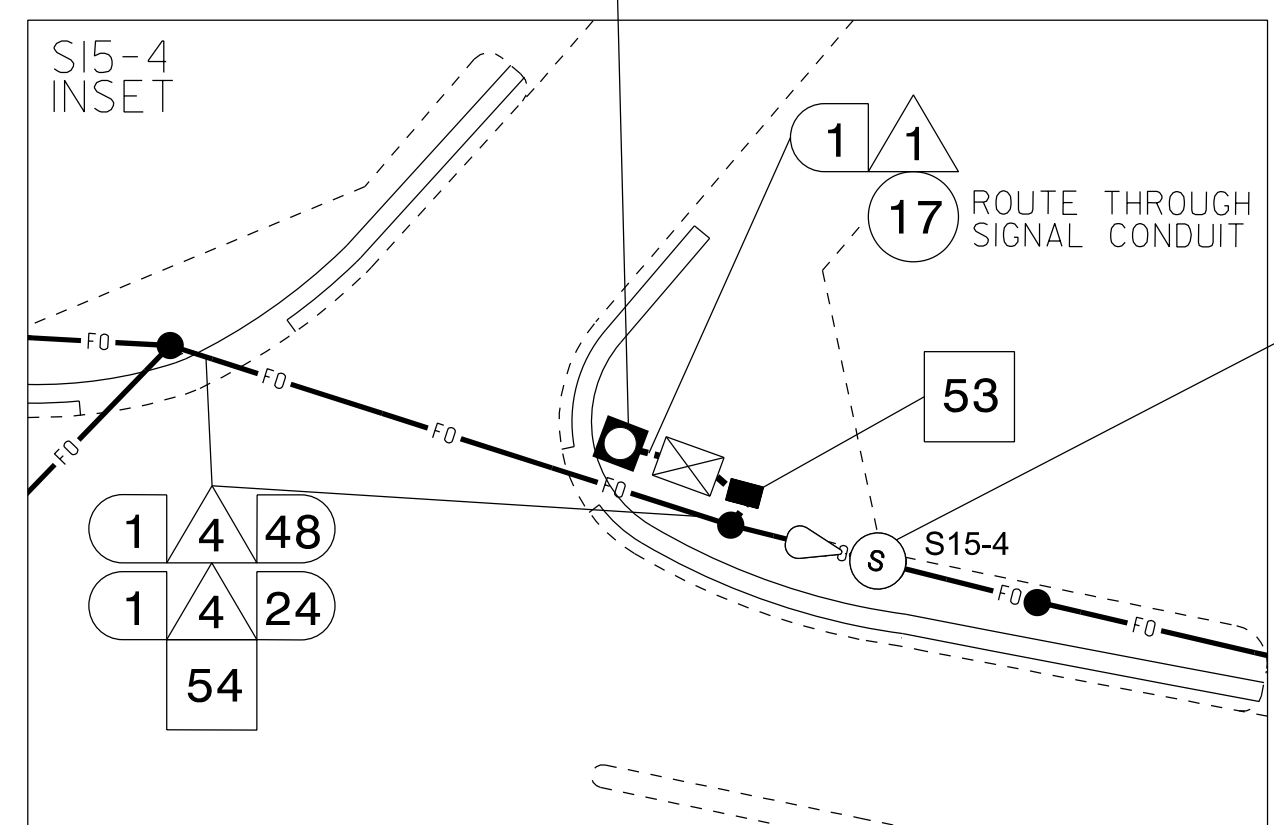
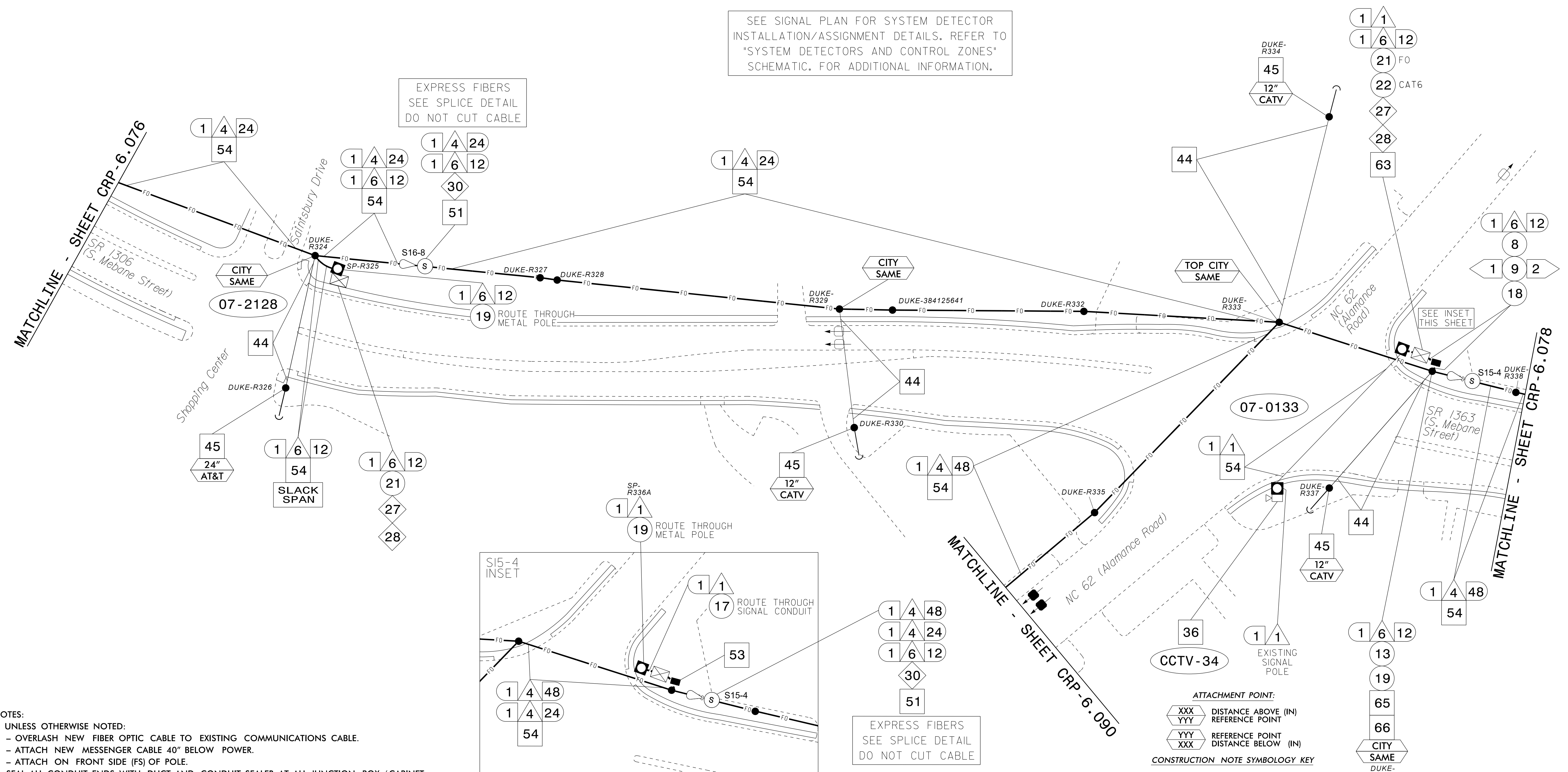
SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 MELISSA B. TOTH  
 License No. 025892

Melissa B. Toth, 13/2018  
 CAD File name: CL-076.dgn

13-JUN-2018 15:43  
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SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC FOR ADDITIONAL INFORMATION.

EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE



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NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUY, ANTENNAS: XX ▲ XX  
 NUMBER OF RISER(S) / CONDUIT(S): XX ○ XX  
 NUMBER OF FIBER TWISTED PAIRS: XX ▲ XX  
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9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-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 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

**Burlington-Graham Signal System Cable Routing Plans**

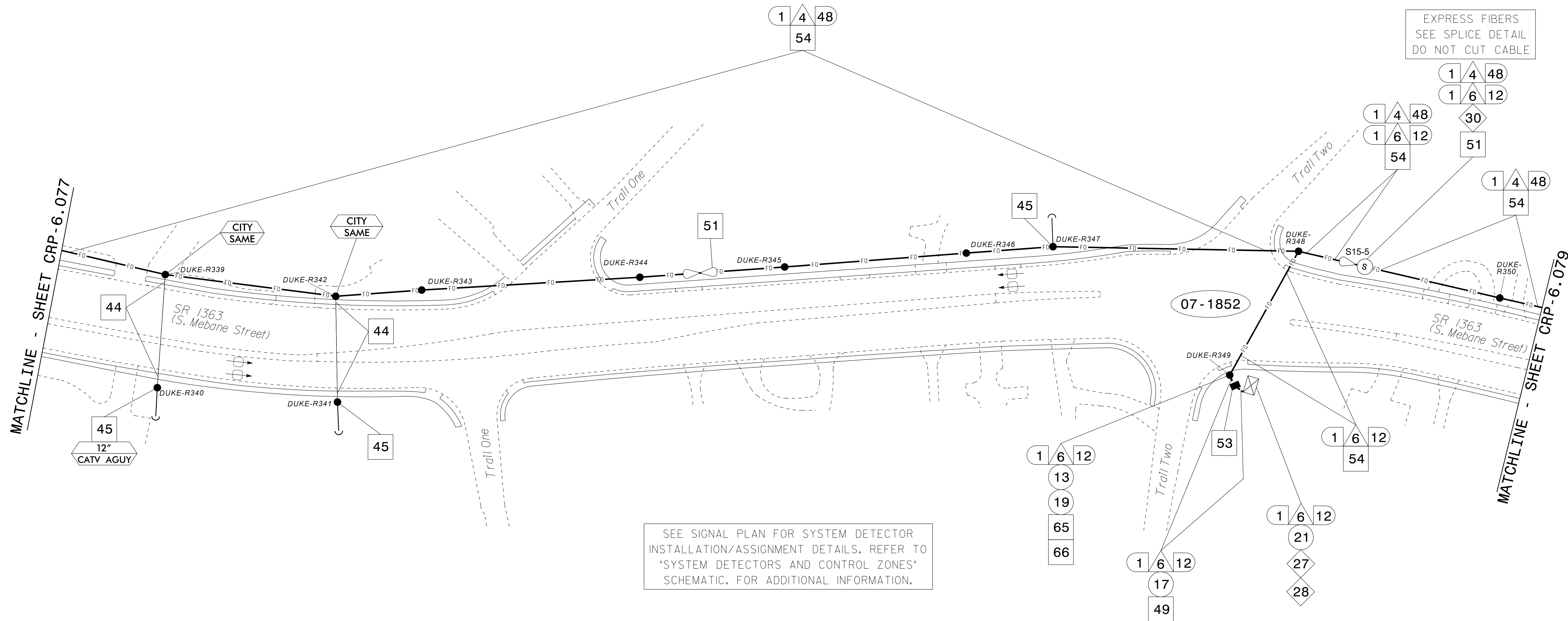
Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018	REVIEWED BY: M B Toth
PREPARED BY: ANE/AJH/VJP/NAP/JAW	REVIEWED BY: B J Slocum
REVISIONS	
INIT.	DATE

SCALE: 0 50 1"=50'

**SEAL**  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 025892  
MELISSA B. TOTTH  
Documented by: Melissa B. Toth  
CADD File name: CL-077.dgn

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 AT LUS333048

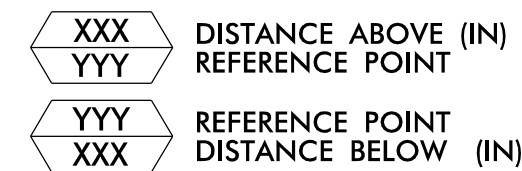


SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

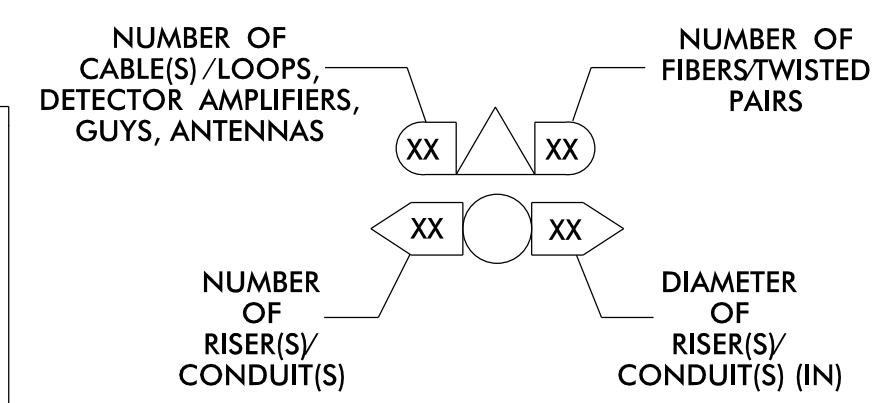
**NOTES:**

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- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

**ATTACHMENT POINT:**



**CONSTRUCTION NOTE SYMBOLOLOGY KEY**



**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
 RALEIGH, NORTH CAROLINA 27609  
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Prepared for the Offices of:  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Transportation Systems Division

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth  
 PREPARED BY: AWE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE: 0 50  
 1"=50'

REVISIONS: INIT. DATE

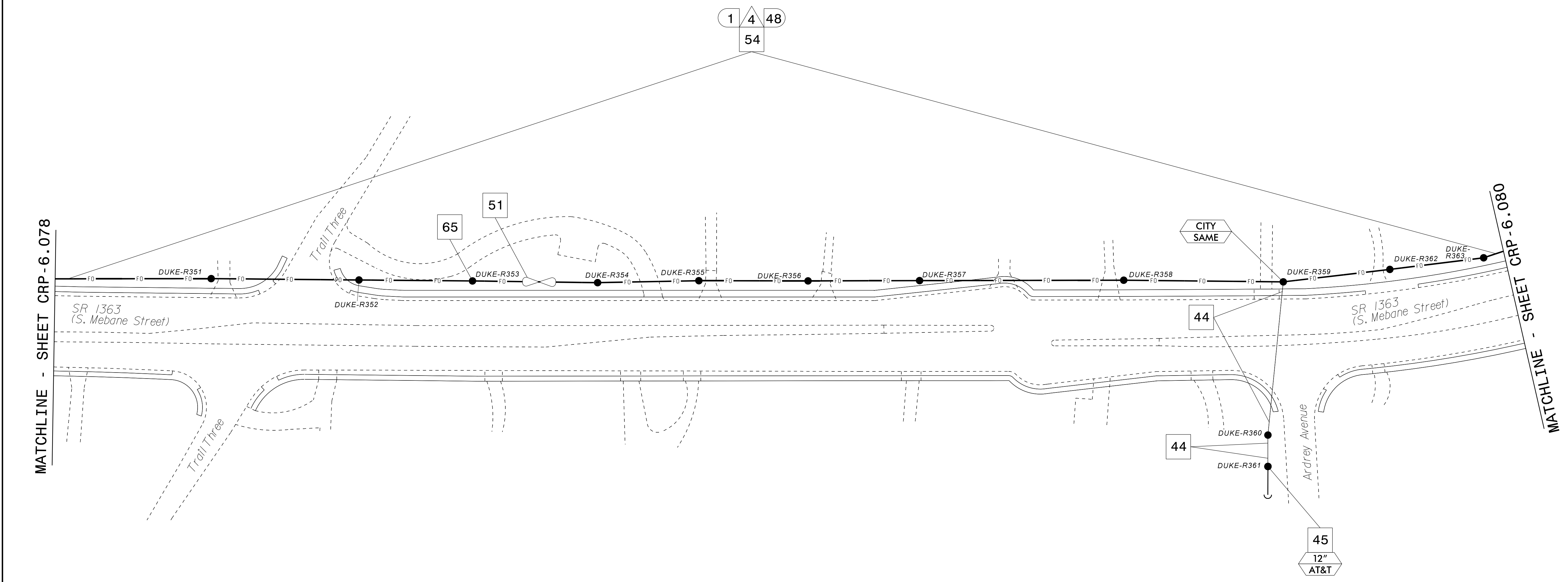
Melissa B. Toth 1/13/2018

DATE: \_\_\_\_\_

CADD File name: CL-078.dgn

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 AT LUS333048





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XXX  
YYY DISTANCE ABOVE (IN)  
REFERENCE POINT

YYY  
XXX REFERENCE POINT  
DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLOLOGY KEY**

NUMBER OF CABLE(S) / LOOPS, DETECTOR / AMPLIFIERS, GUYS, ANTENNAS: XX △ XX

NUMBER OF FIBER/TWISTED PAIRS: XX △ XX

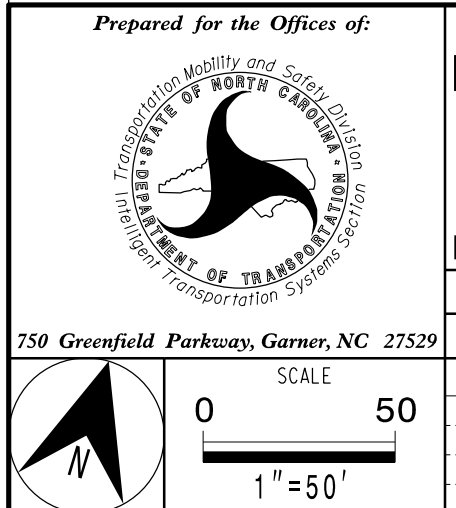
NUMBER OF RISER(S) / CONDUIT(S): XX ○ XX

DIAMETER OF RISER(S) / CONDUIT(S) (IN): XX ○ XX

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

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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

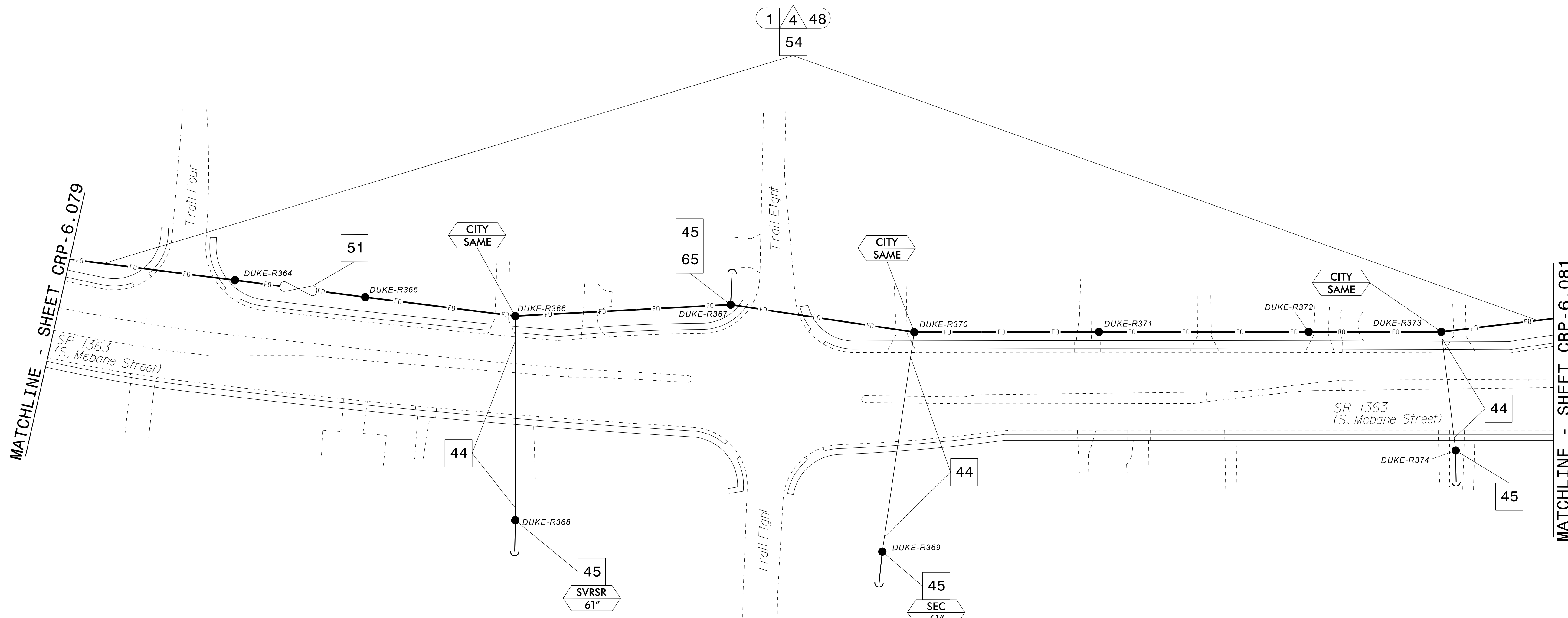
PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth B J Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE: 1"=50'

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
MELISSA B. TOTH  
025892  
13/2018  
DATE

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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 180  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-8888 NCBEES #F-0326

Prepared for the Offices of:  
  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

750 Greenfield Parkway, Garner, NC 27529

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

025892

MELISSA B. 10TH

Melissa B. Toth 6/13/2018

DATE

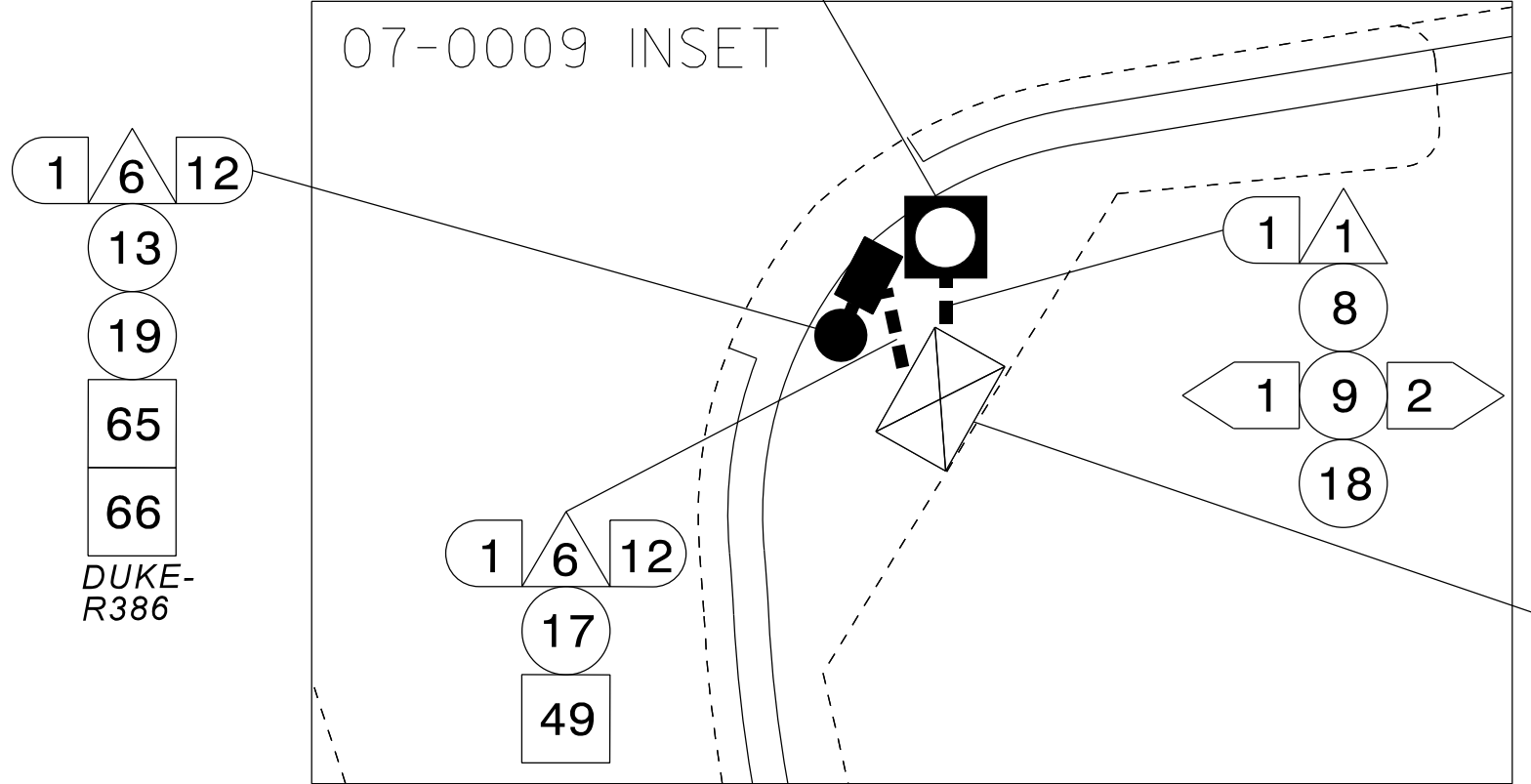
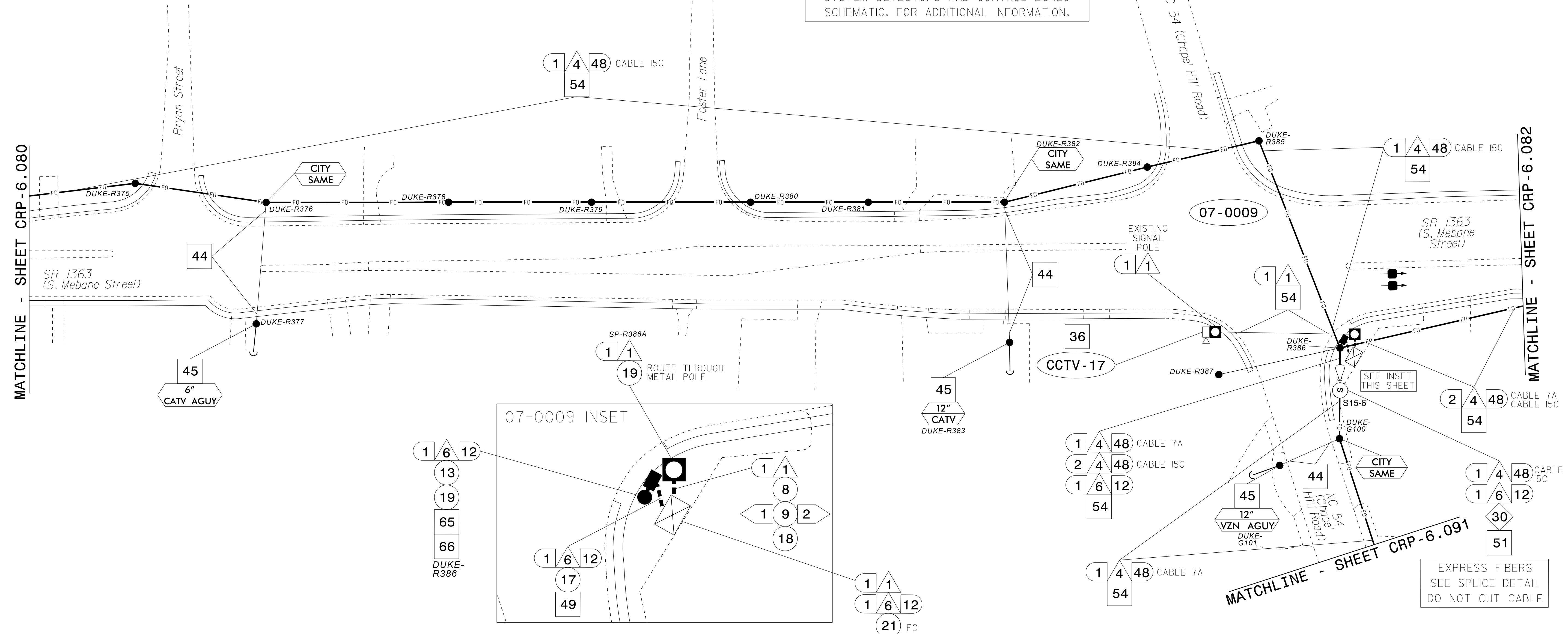
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9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
	21 INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE		42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

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

Prepared for the Offices of:  

 North Carolina Department of Transportation

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS: \_\_\_\_\_ INIT. DATE

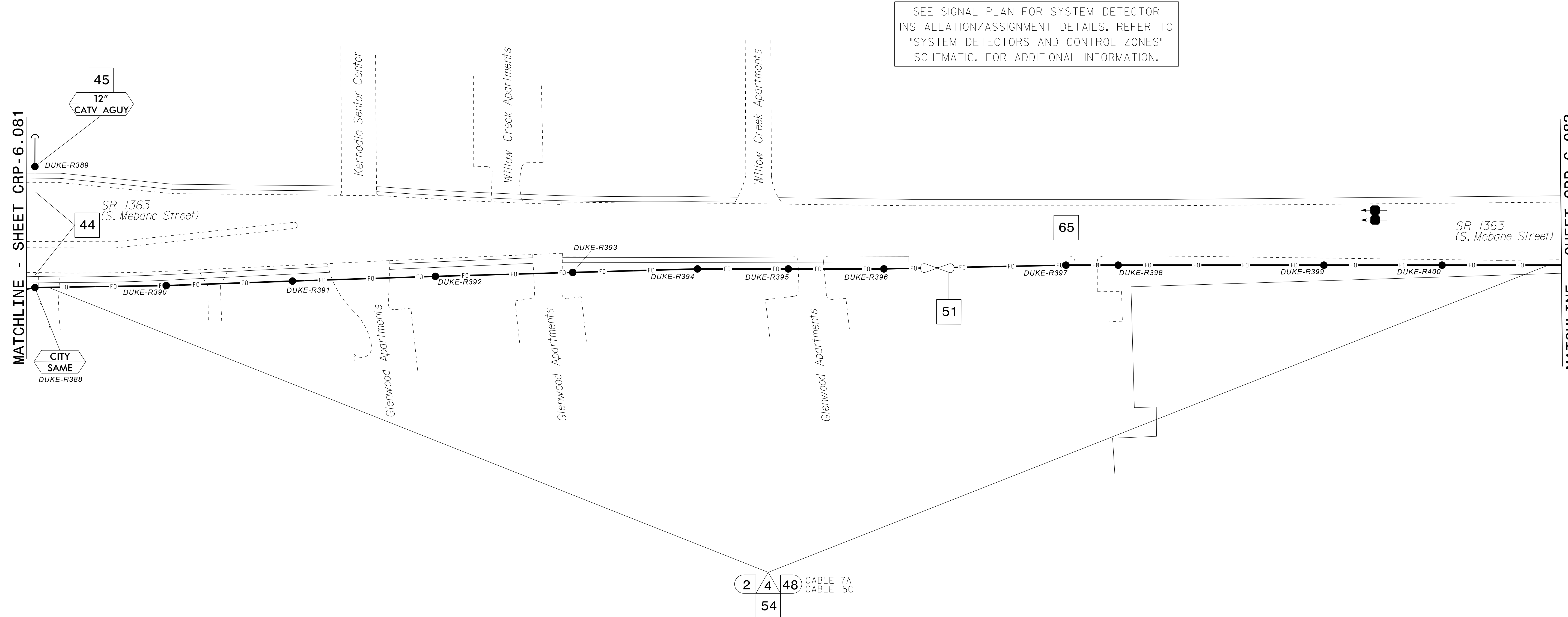
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SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

CADD File name: CL-081.dgn

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**NOTES:**

- UNLESS OTHERWISE NOTED:
  - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
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**ATTACHMENT POINT:**

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YYY DISTANCE ABOVE (IN) REFERENCE POINT

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XXX REFERENCE POINT DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLGY KEY**

NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUY, ANTENNAS

NUMBER OF RISER(S) / CONDUIT(S)

DIAMETER OF RISER(S) / CONDUIT(S) (IN)

NUMBER OF FIBER/TWISTED PAIRS

**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
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1. INSTALL CATEGORY 6 CABLE	11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22. INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32. MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43. REMOVE EXISTING WOOD POLE	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE	66. BOND RISER TO POLE GROUND
2. INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12. INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23. INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33. REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44. INSTALL AERIAL GUY ASSEMBLY	56. LASH CABLE(S) TO NEW MESSENGER CABLE	67. BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3. INSTALL COMPOSITE CCTV CABLE	13. INSTALL HEAT SHRINK TUBING KIT	24. INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34. INSTALL CABINET FOUNDATION	45. INSTALL STANDARD GUY ASSEMBLY	57. MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68. BOND TRACER WIRE TO POLE GROUND
4. INSTALL SMFO CABLE	14. INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25. INSTALL NEW RISER INTO POLE MOUNTED CABINET	35. REMOVE EXISTING CABINET FOUNDATION	46. INSTALL SIDEWALK GUY ASSEMBLY	58. INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69. HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5. INSTALL COAXIAL ANTENNA CABLE	15. DIRECTIONAL DRILL CONDUIT	26. INSTALL DIGITAL VIDEO ENCODER	36. INSTALL CCTV CAMERA ASSEMBLY	47. INSTALL MESSENGER CABLE	59. INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70. INSTALL CCTV CABINET DISCONNECT
6. INSTALL FIBER-OPTIC DROP CABLE	16. BORE AND JACK CONDUIT	27. INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37. INSTALL CCTV WOOD POLE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60. INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71. INSTALL MANAGED ETHERNET SWITCH
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*Prepared for the Offices of:*

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

SCALE: 0 50  
1"=50'

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth B J Slocum

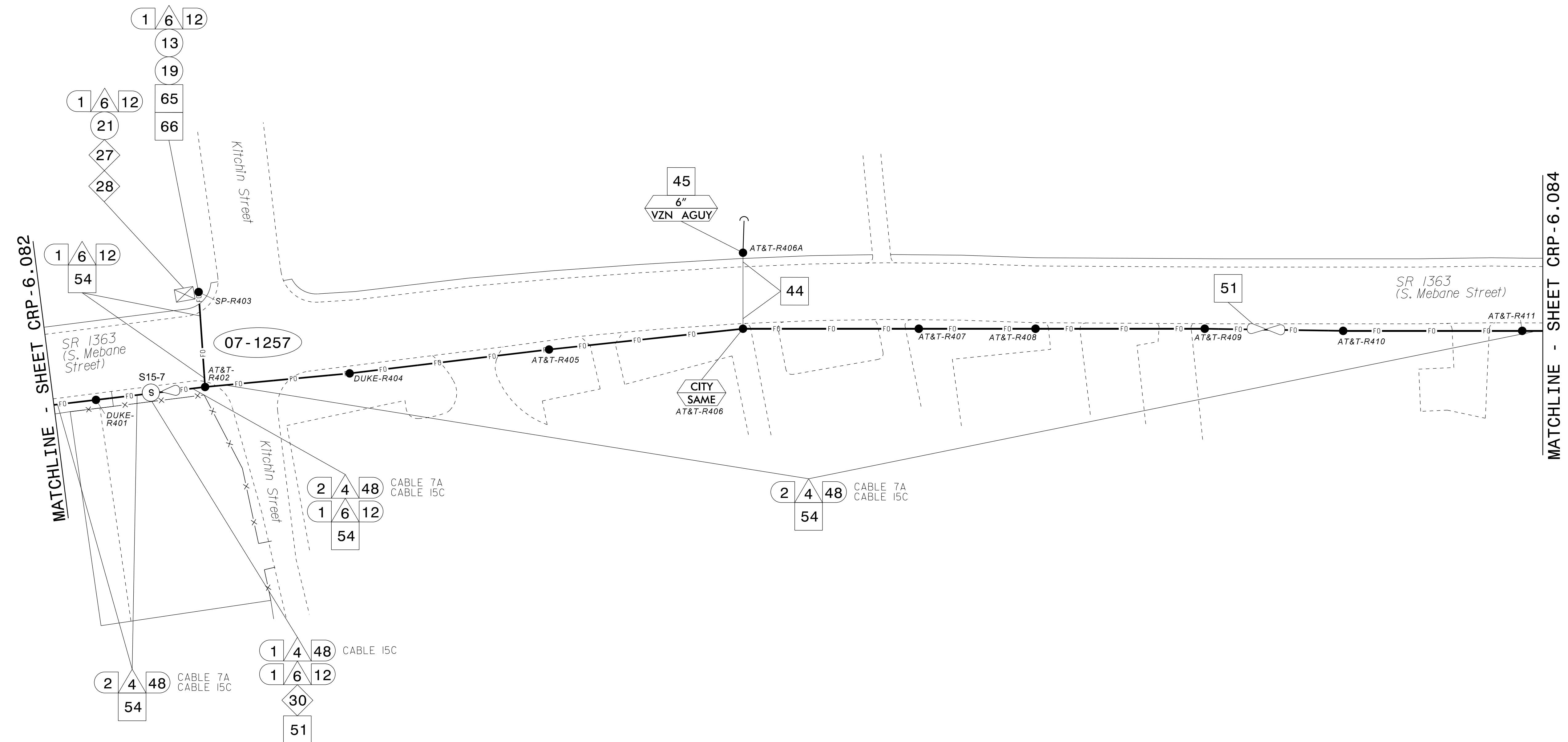
REVISIONS	INIT.	DATE

SEAL

**NORTH CAROLINA PROFESSIONAL ENGINEER**  
025892  
**MELISSA B. TOTH**

Melissa B. Toth 6/13/2018  
DATE

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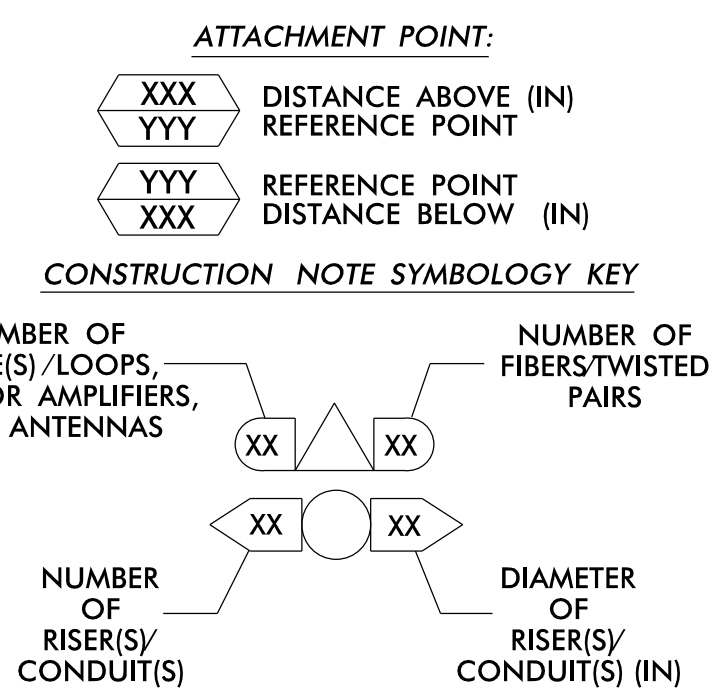


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MATCHLINE - SHEET CRP-6.084

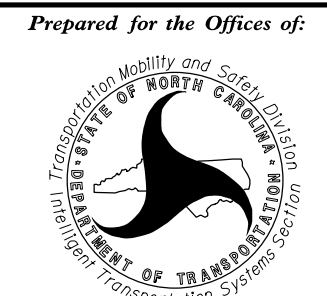
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EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE



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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
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Prepared for the Offices of:  
  
 Department of Transportation  
 Transportation Systems Section

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 MELISSA B. TOOTH  
 025892  
 MELISSA B. TOOTH  
 13/2018  
 DATE

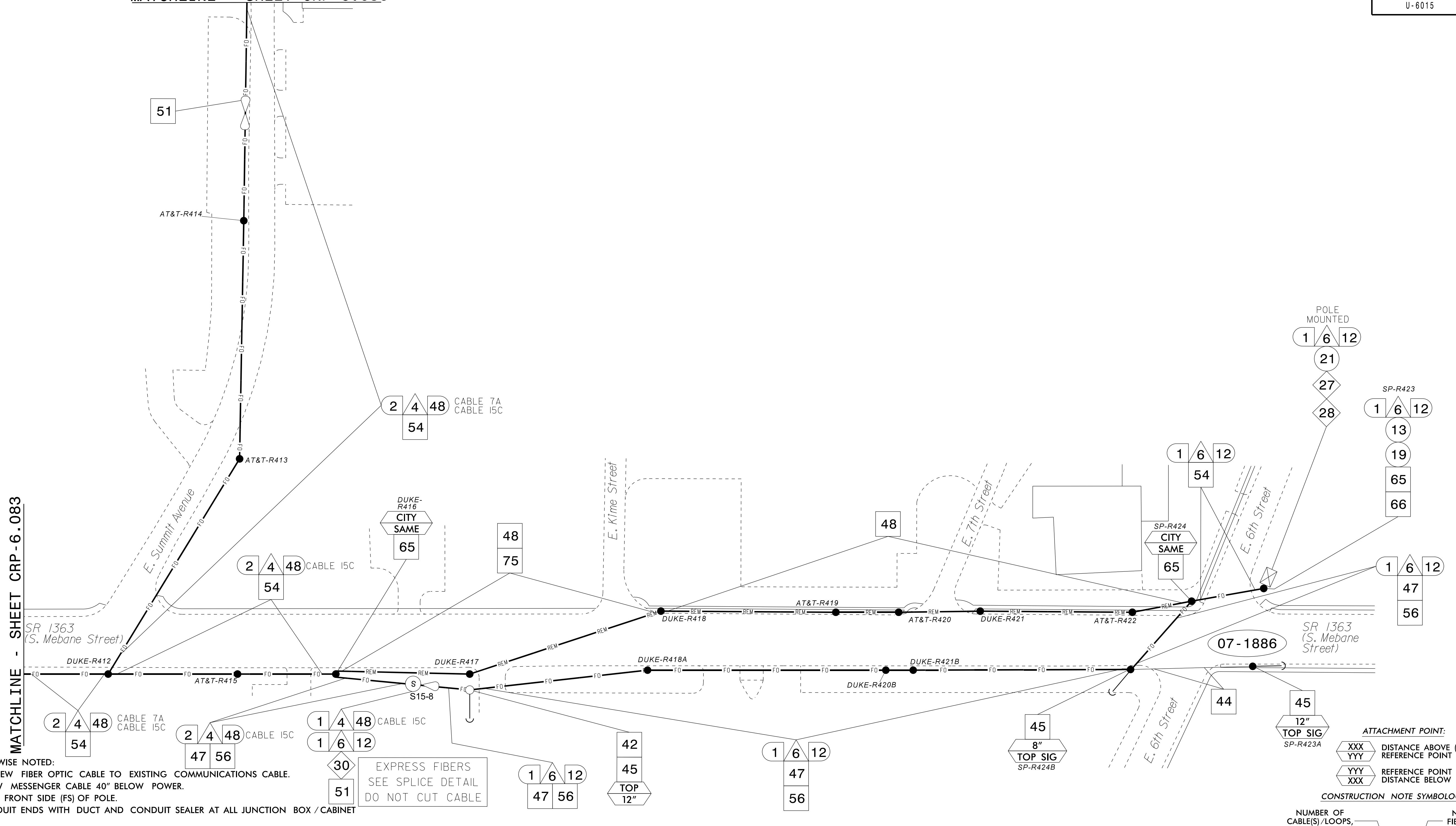
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ENC45386 AT LUS330048

MATCHLINE - SHEET CRP-6.086

MATCHLINE - SHEET CRP-6.083



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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

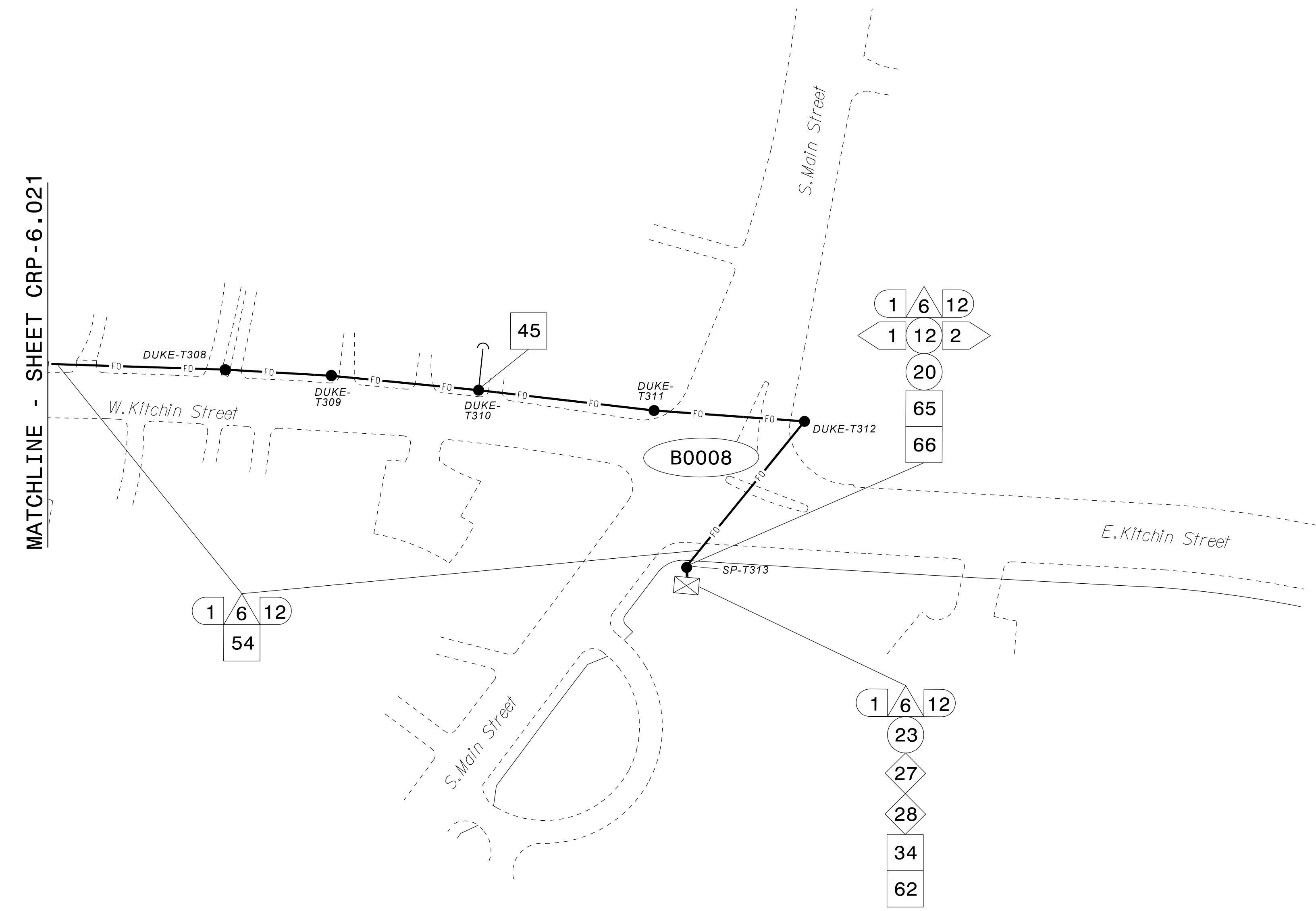
PLAN DATE: June 2018 RALEIGH, NORTH CAROLINA 27609  
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750 Greenfield Parkway, Garner, NC 27529  
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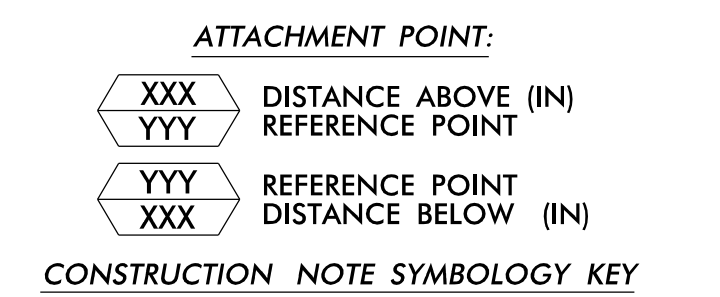
SEAL  
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 SEAL 025892  
 MELISSA B. 10TH  
 Melissa B. Toth 1/13/2018  
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1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

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

### Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

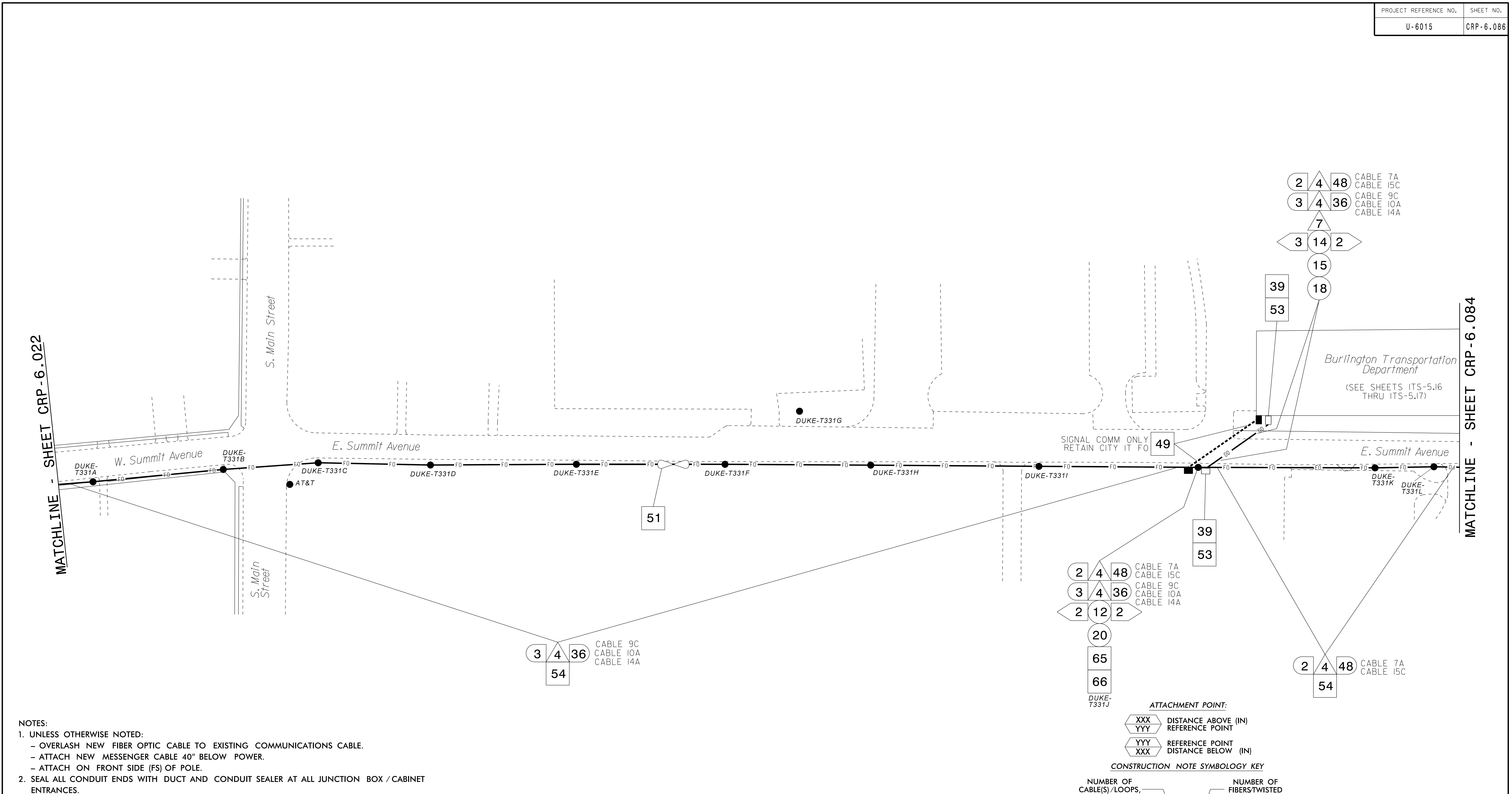
REVISIONS INIT. DATE

750 Greenfield Parkway, Garner, NC 27529

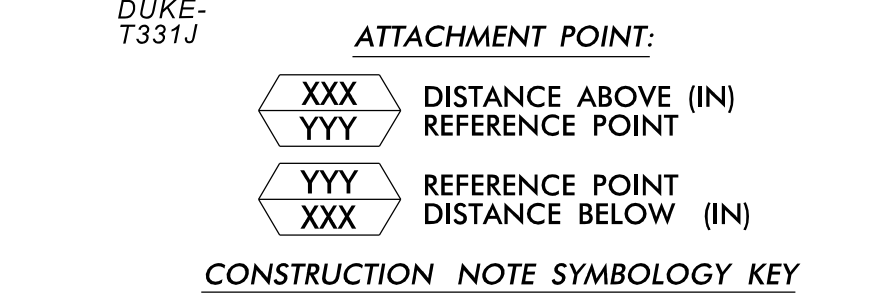
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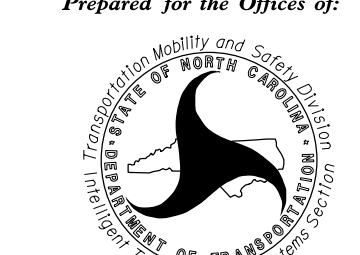
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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

*Prepared for the Offices of:*

 **North Carolina Department of Transportation**

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

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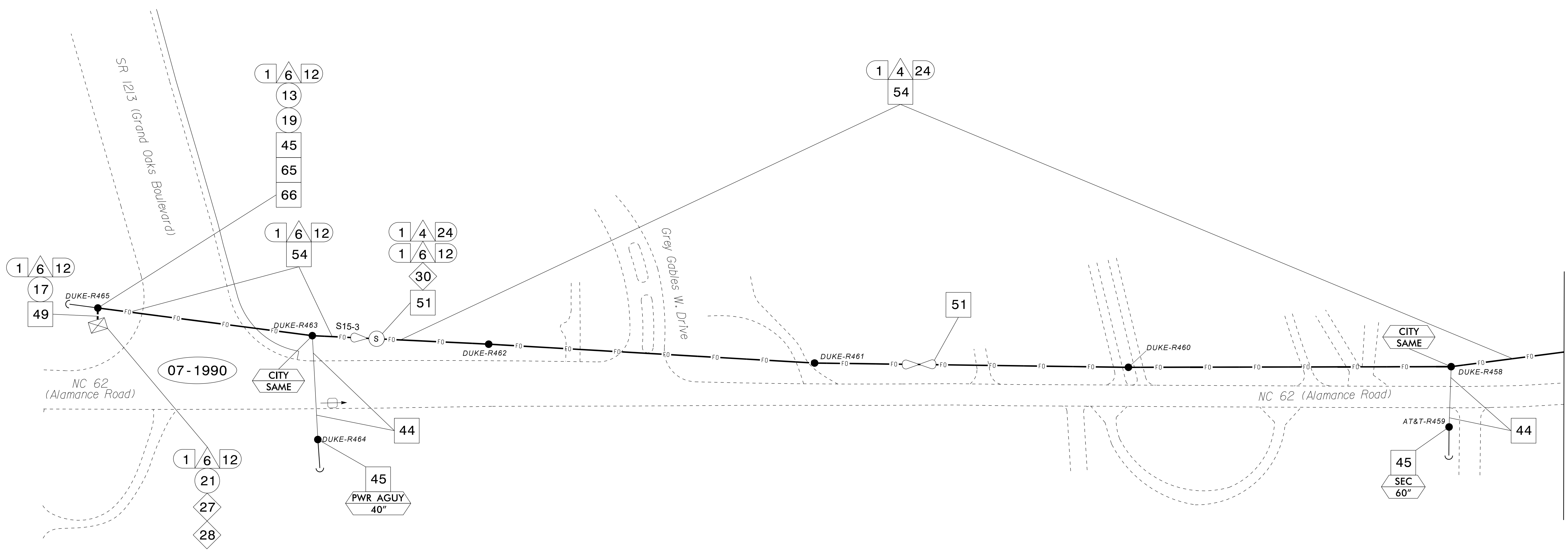
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOOTH 025892

Melissa B. Toth 11/13/2018

CADD File Name: CL-086.dgn

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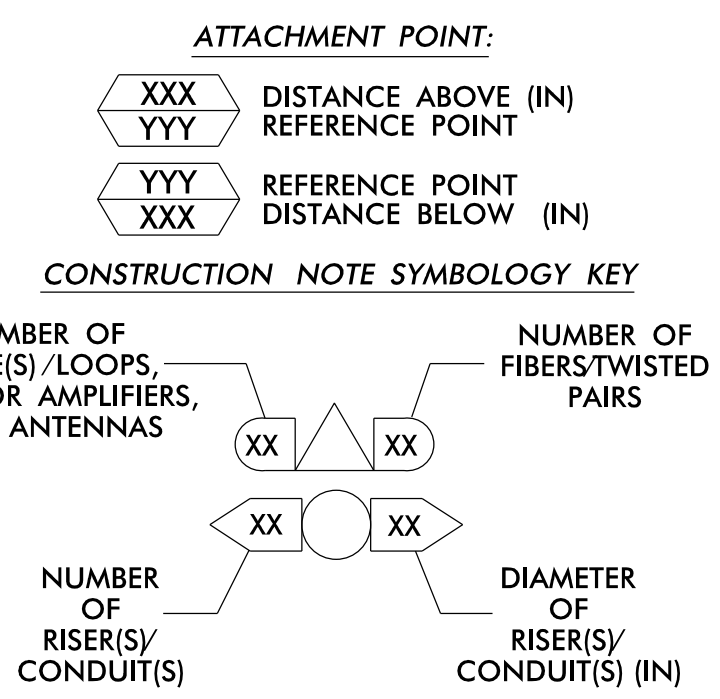




MATCHLINE - SHEET CRP-6.088

SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529

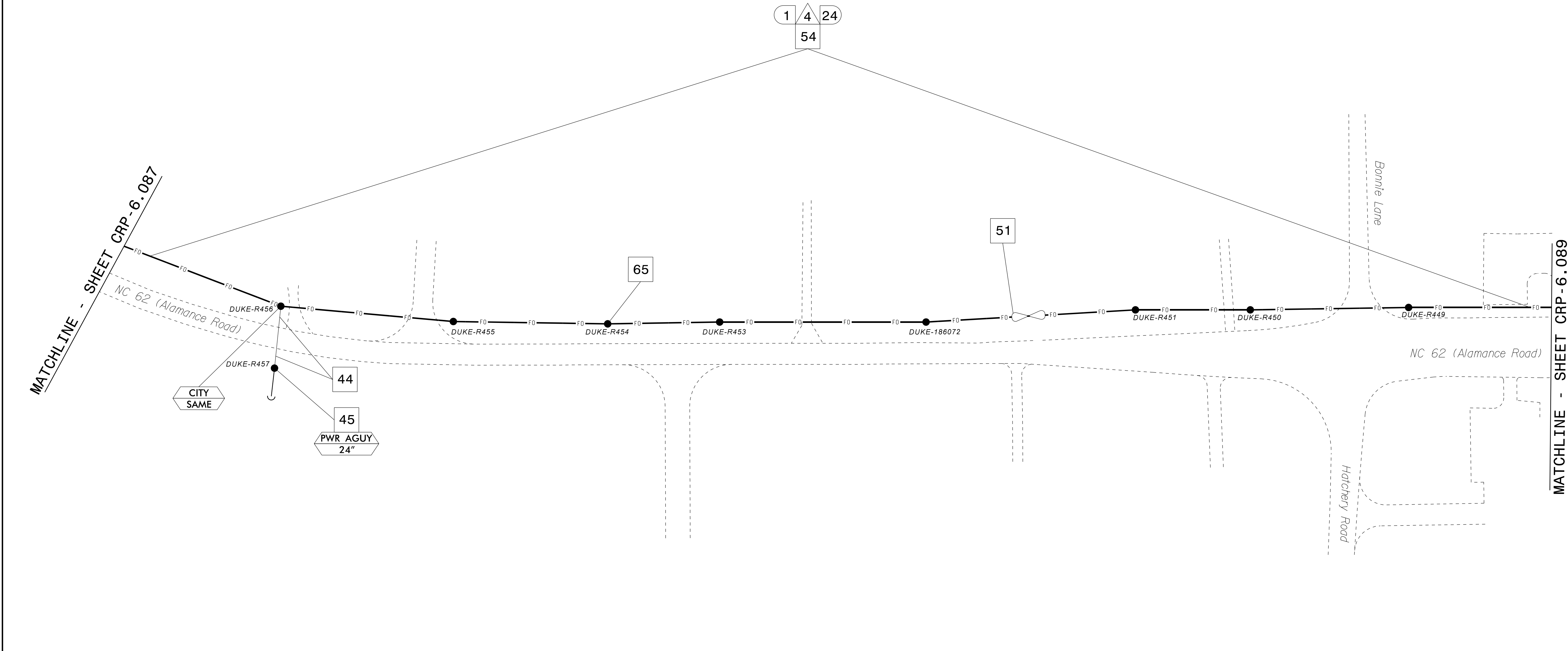
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SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOOTH 025892

Melissa B. Toth 6/13/2018

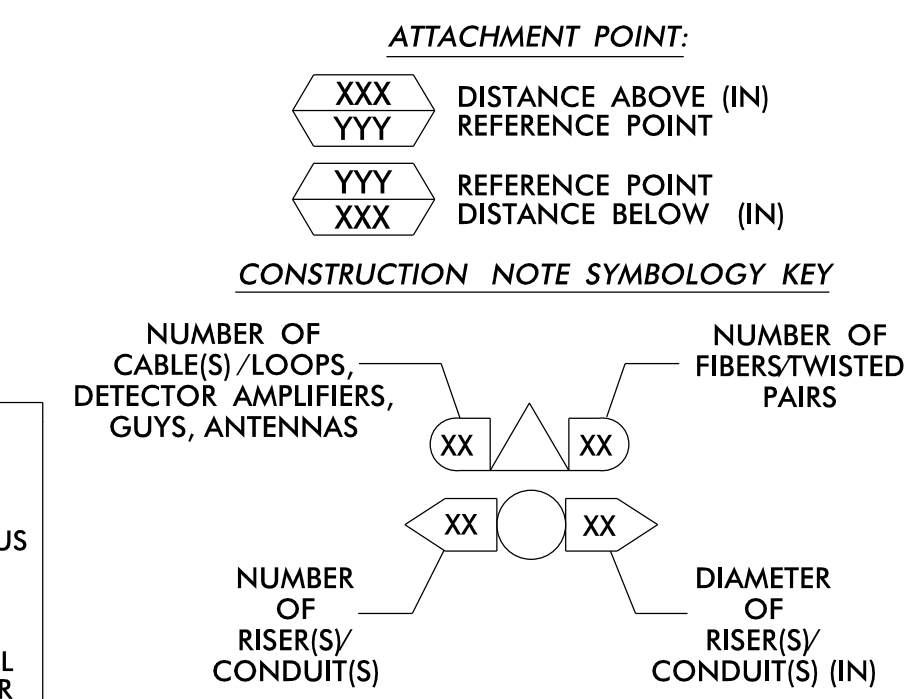
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**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

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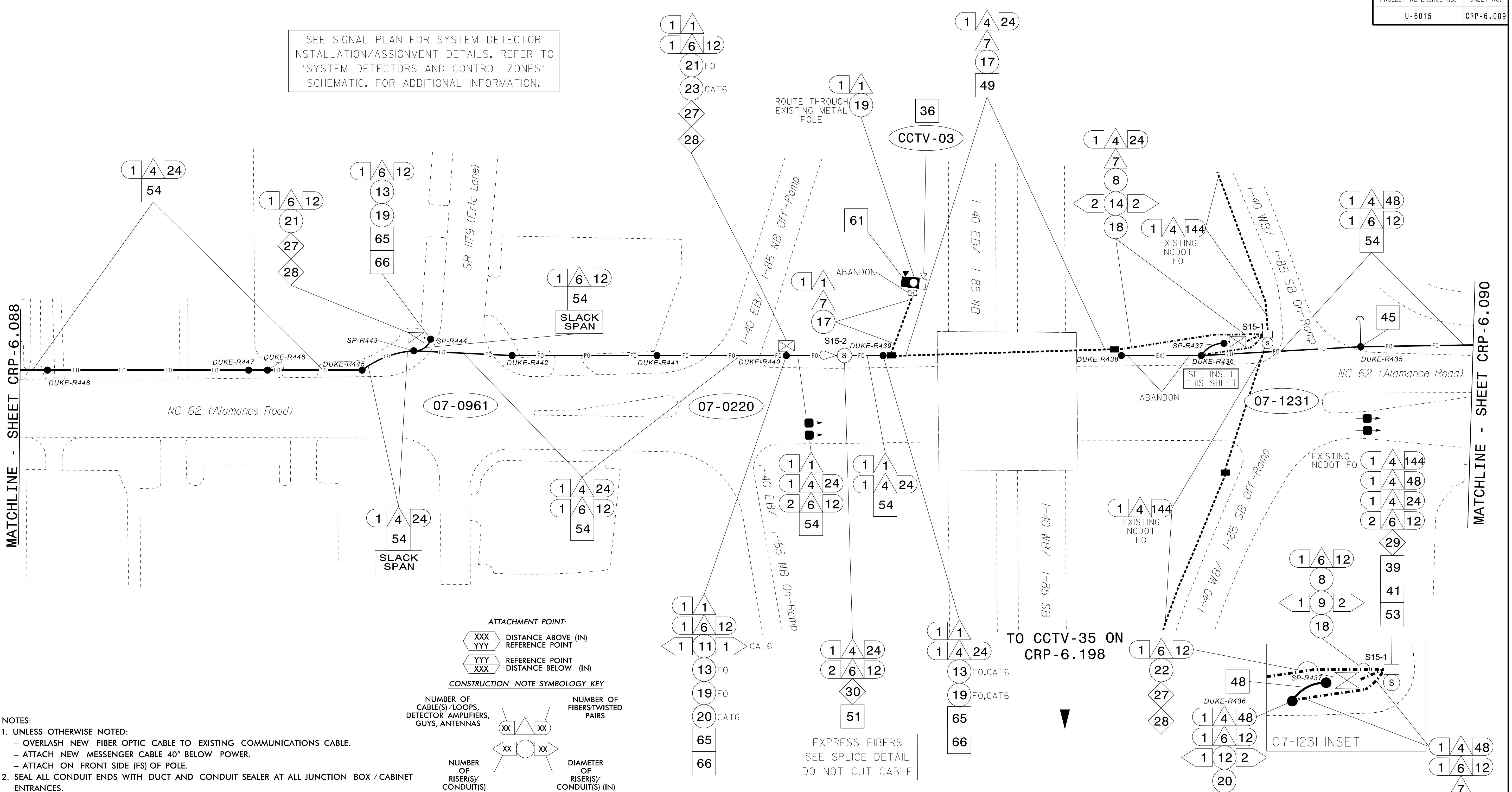
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

CADD File name: CL-088.dgn

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 ENCA5396 AT LUS330048

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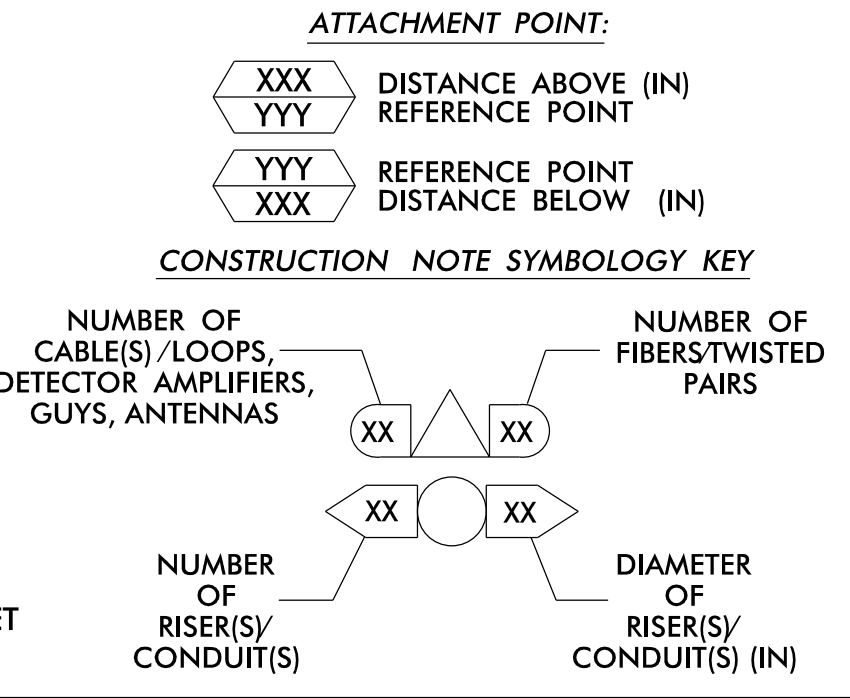
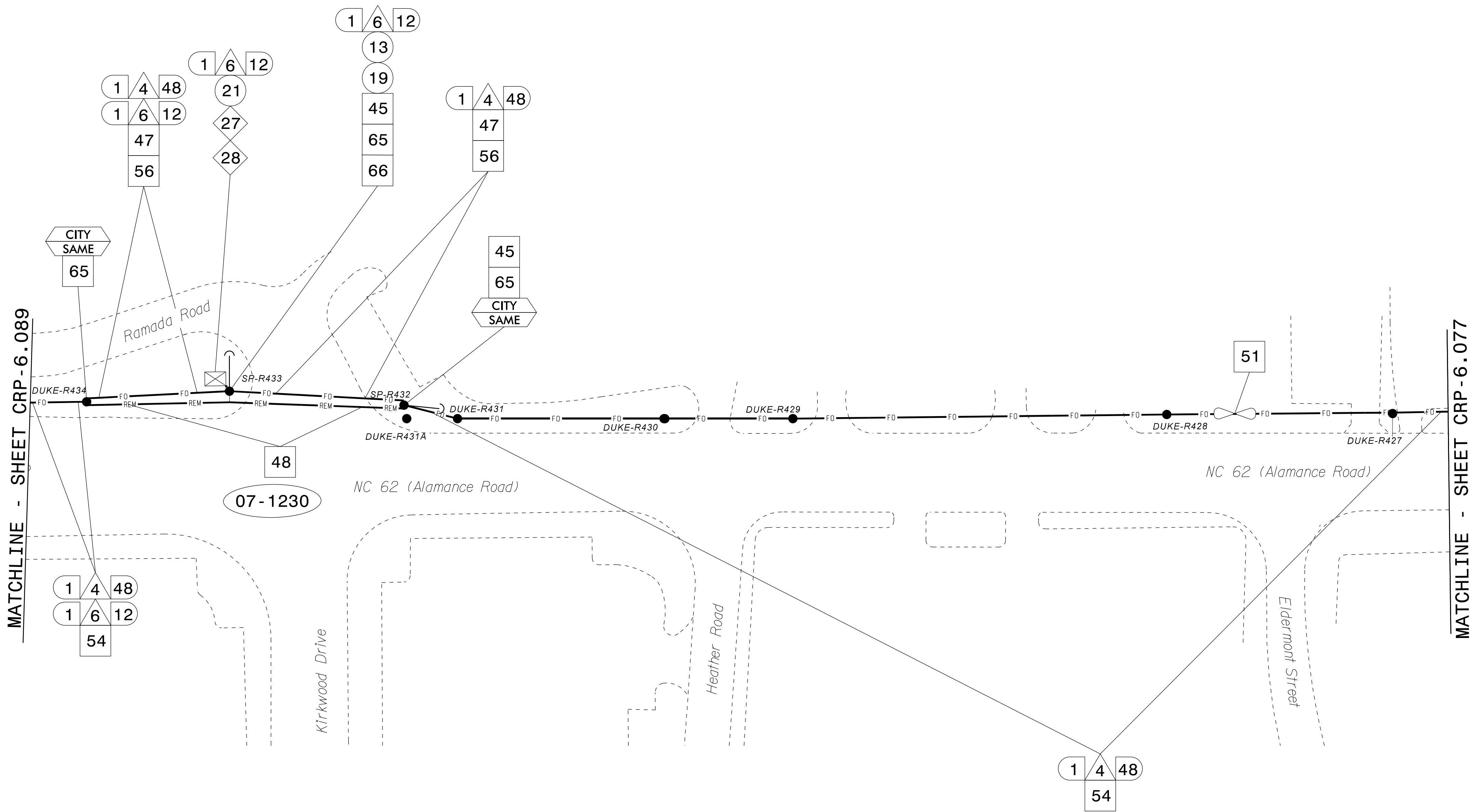


Table of 77 construction notes, each with a numbered symbol and a corresponding description of the required work, such as 'INSTALL CATEGORY 6 CABLE', 'REMOVE EXISTING WOOD POLE', and 'INSTALL AERIAL GUY ASSEMBLY'.

Project information block including the Atkins logo, project name 'Burlington-Graham Signal System Cable Routing Plans', location 'Alamance County', plan date 'June 2018', and a signature block for Melina B. Toth.

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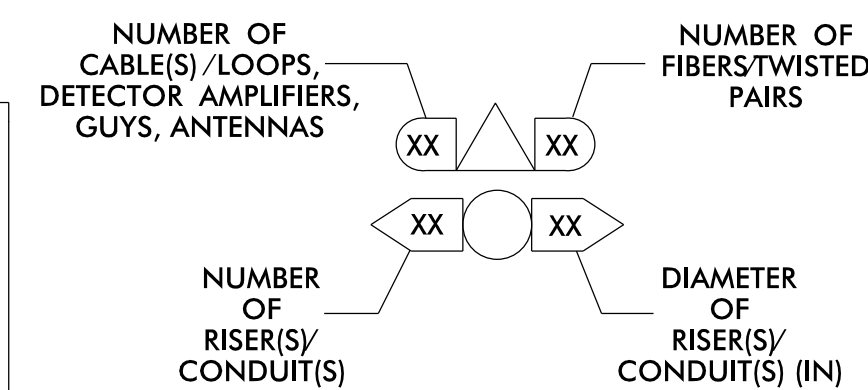
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**ATTACHMENT POINT:**



**CONSTRUCTION NOTE SYMBOLOLOGY KEY**



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			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

**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**

Prepared for the Offices of:  

 State of North Carolina  
 Department of Transportation  
 Transportation Systems Division

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529

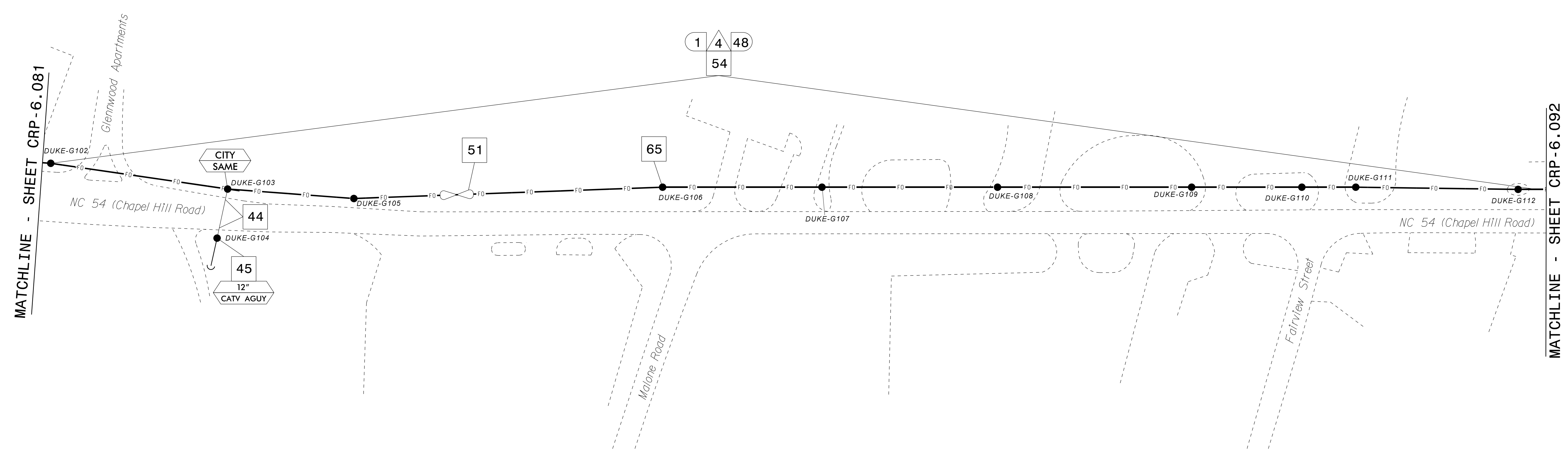
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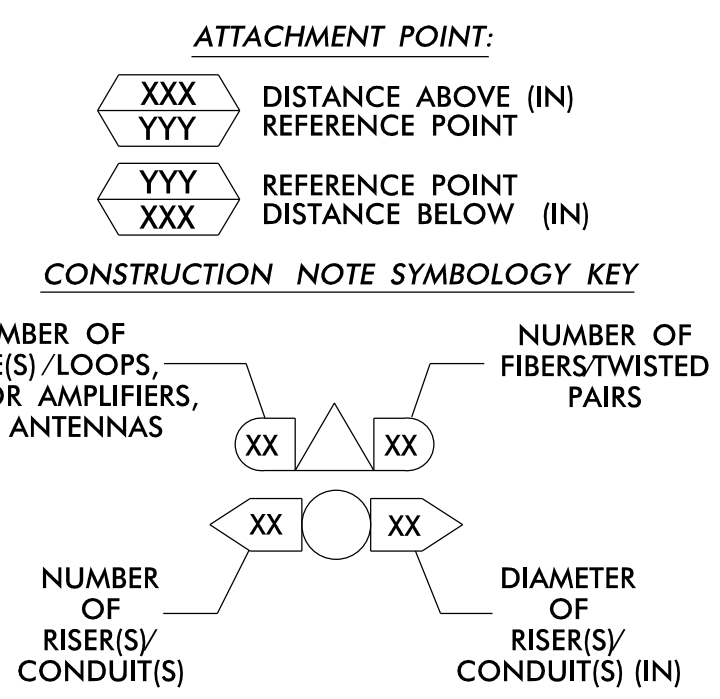
Melissa B. Toth, 13/2018  
 SEAL NORTH CAROLINA PROFESSIONAL ENGINEER 025892  
 MELISSA B. TOTH

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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 CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
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Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth B J Slocum

REVISIONS INIT. DATE

SCALE 1"=50'

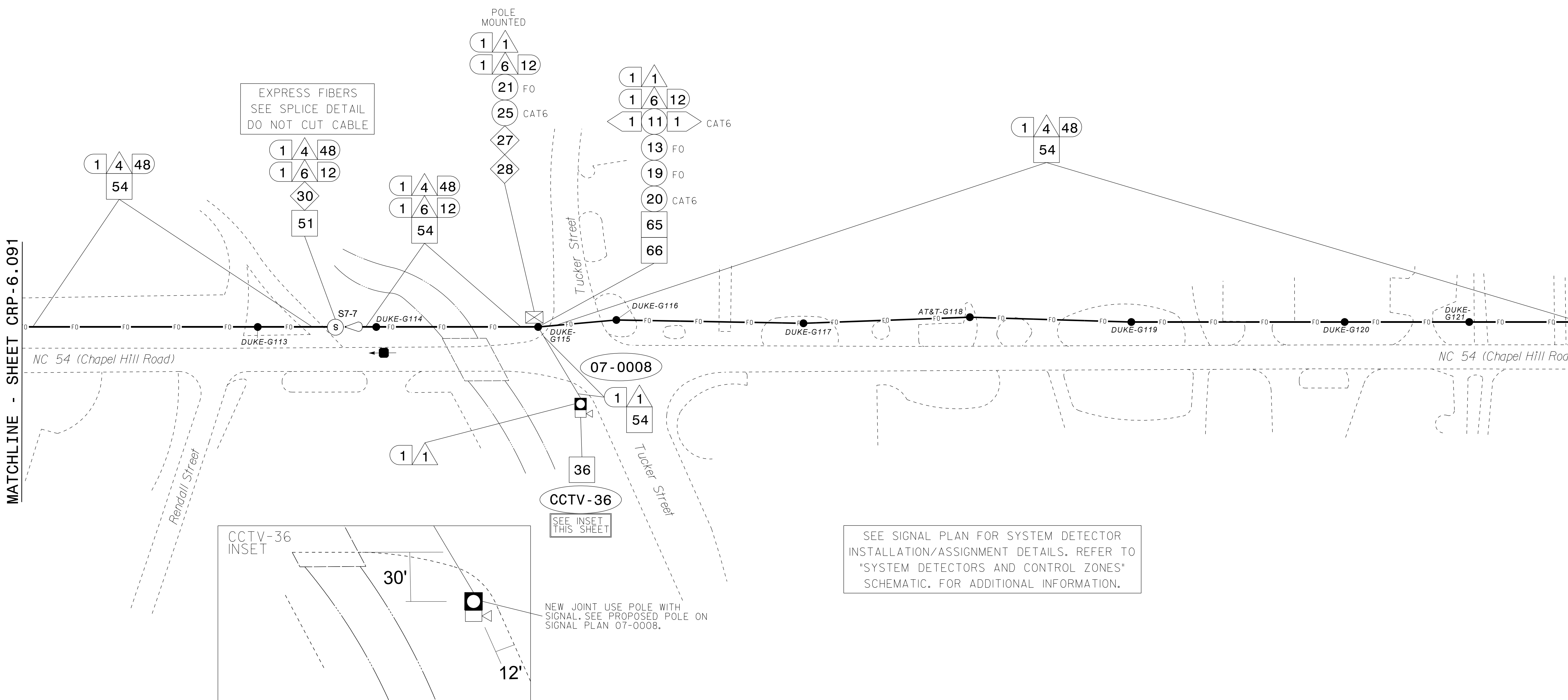
Melissa B. Toth 1/13/2018

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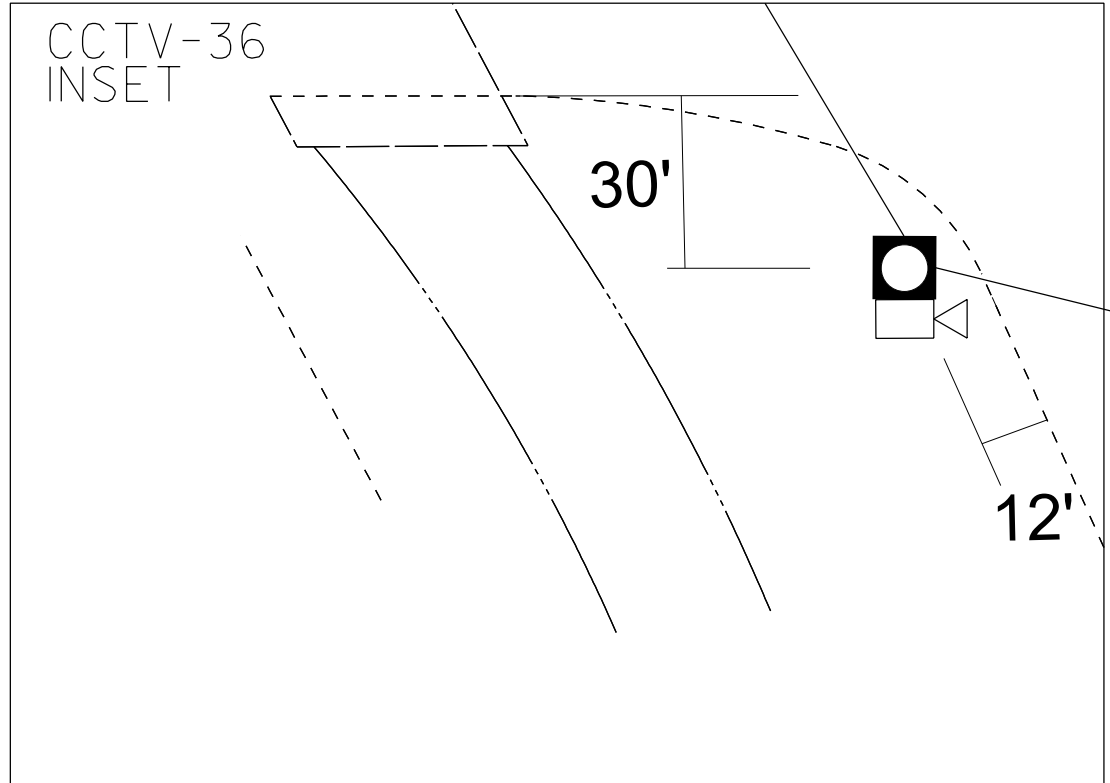
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MATCHLINE - SHEET CRP-6.093



EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

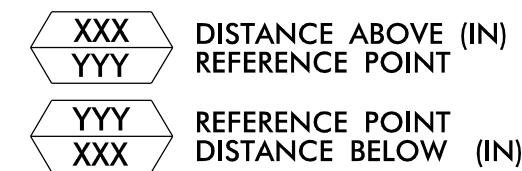
SEE SIGNAL PLAN FOR SYSTEM DETECTOR  
INSTALLATION/ASSIGNMENT DETAILS. REFER TO  
"SYSTEM DETECTORS AND CONTROL ZONES"  
SCHEMATIC. FOR ADDITIONAL INFORMATION.



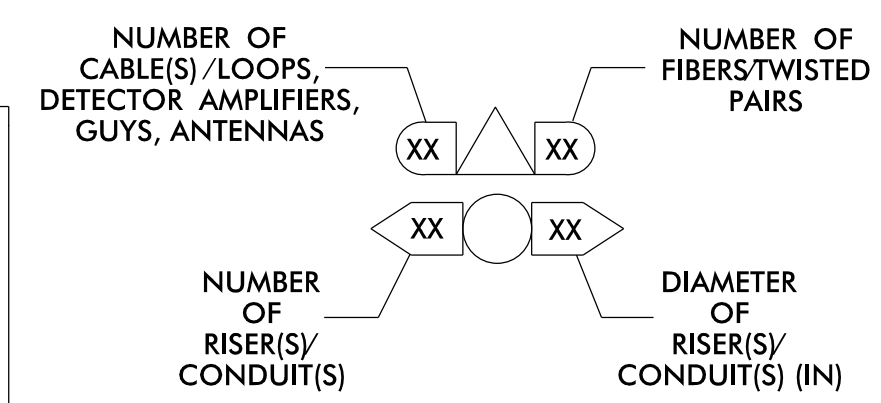
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ATTACHMENT POINT:



CONSTRUCTION NOTE SYMBOLOLOGY KEY



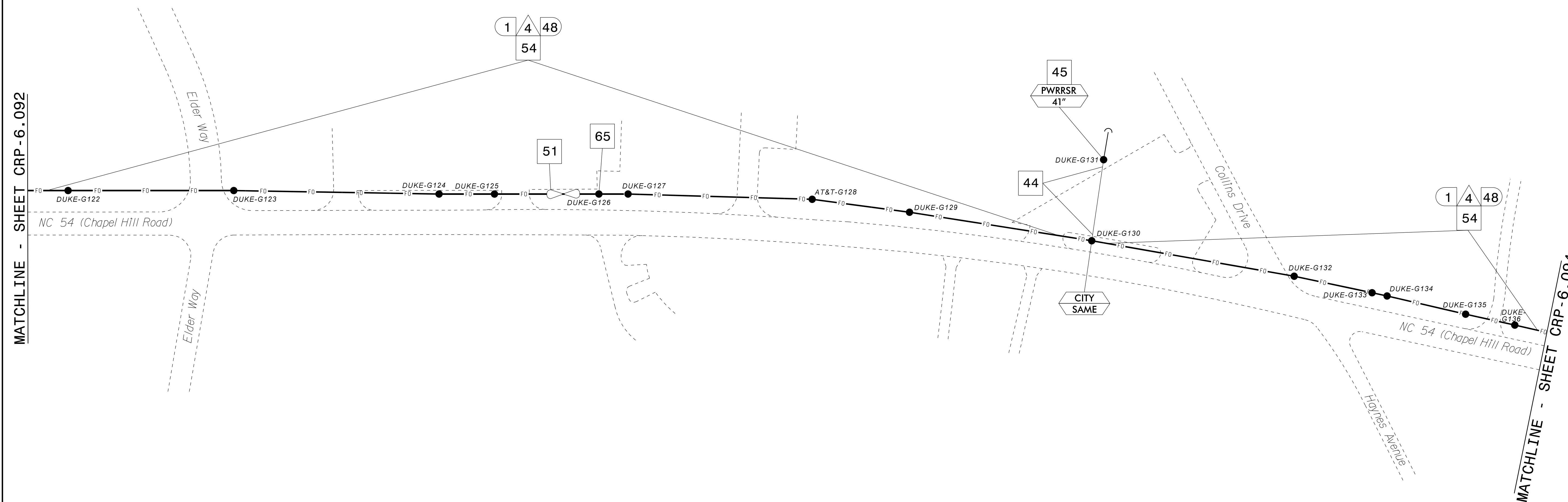
ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

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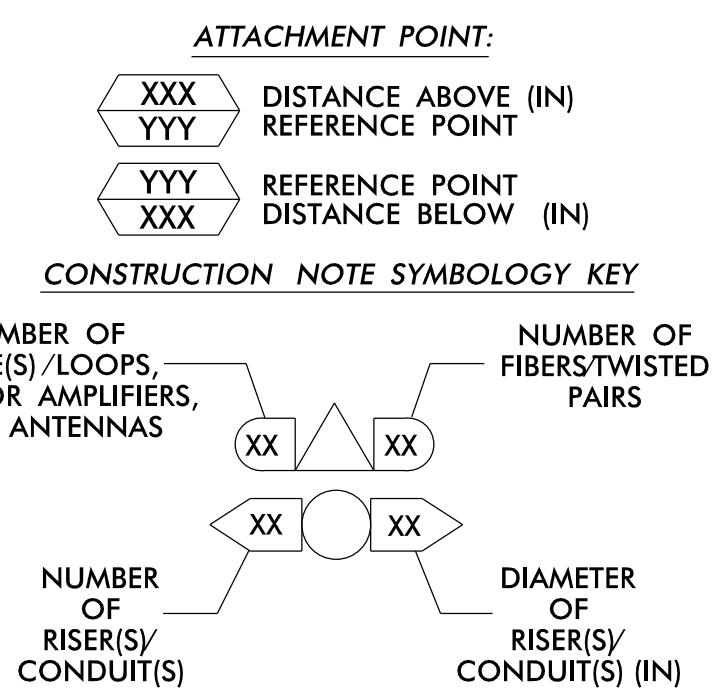
Project information block including title 'Burlington-Graham Signal System Cable Routing Plans', division, county, plan date, and revision table.

Legend table with 77 numbered items describing cable types, conduit, poles, and installation instructions.

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Prepared for the Offices of:

750 Greenfield Parkway, Garner, NC 27529

**Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS	INIT.	DATE

SEAL

Melissa B. Toth 11/13/2018

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