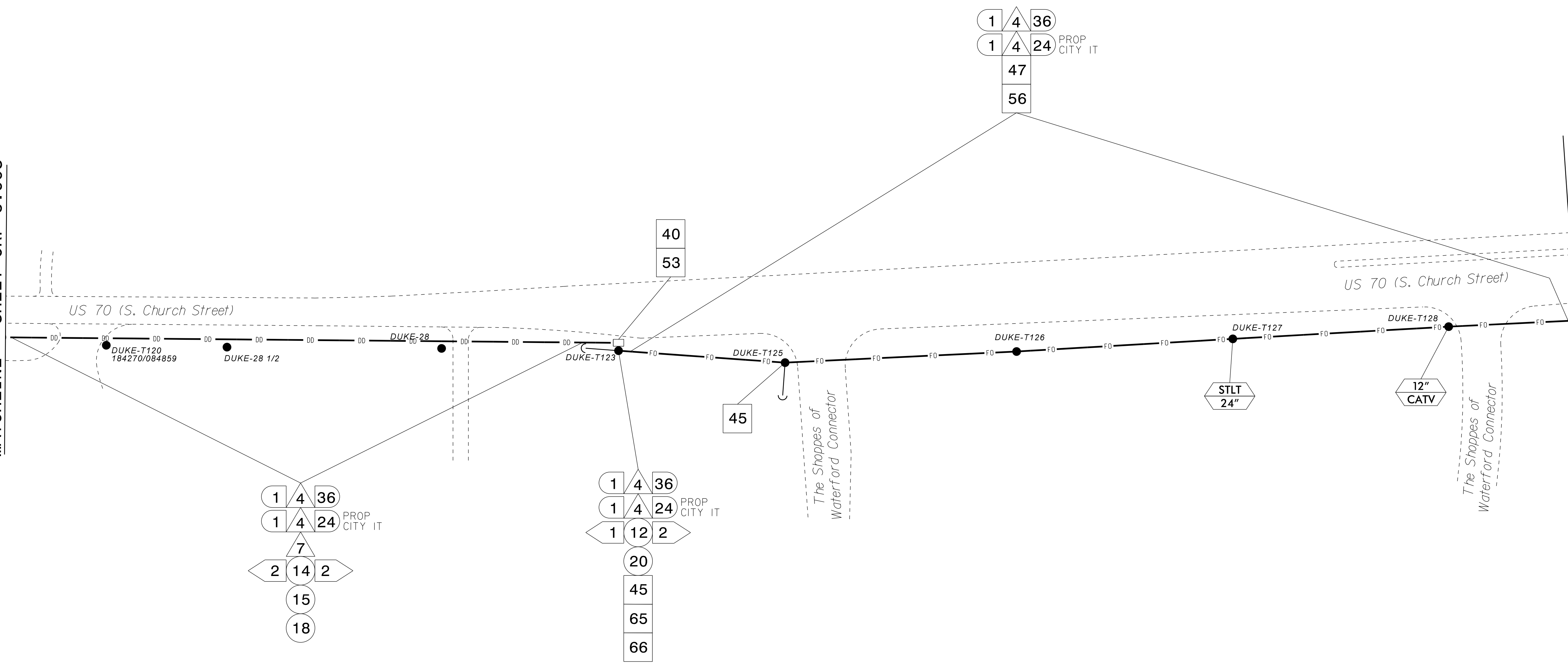


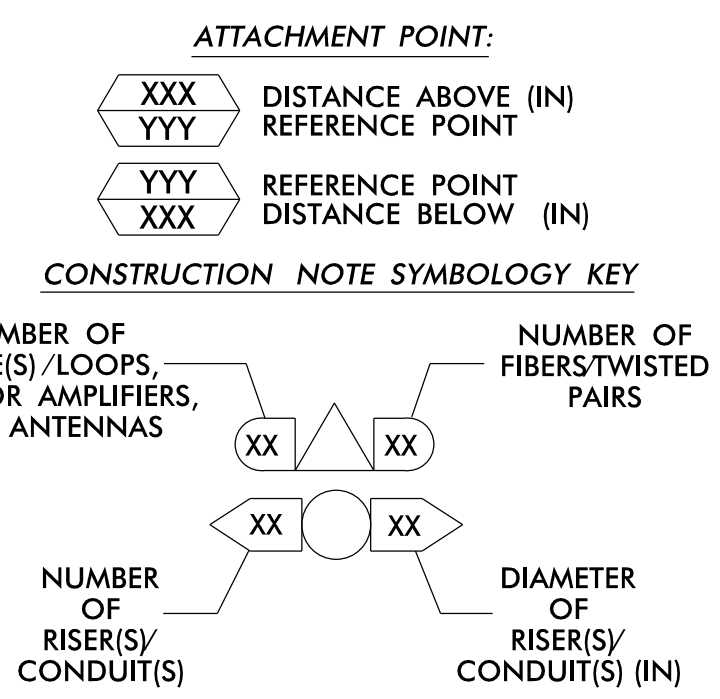


MATCHLINE - SHEET CRP-6.003

MATCHLINE - SHEET CRP-6.005



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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.



|    |   |    |   |    |   |    |   |    |  |     |   |    |   |
|----|---|----|---|----|---|----|---|----|--|-----|---|----|---|
| 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               |    |   |
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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: **STATE 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

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

REVISIONS INIT. DATE

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOOTH 025892

Melissa B. Toth 6/13/2018

CADD File name: CL-004.dgn

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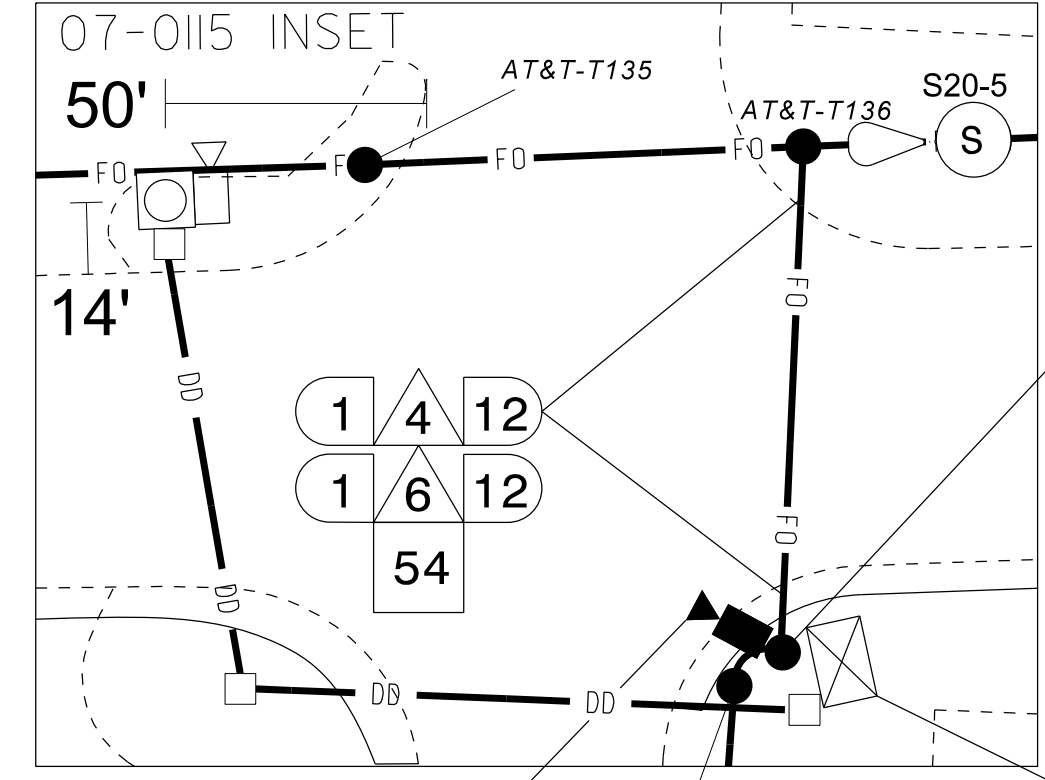
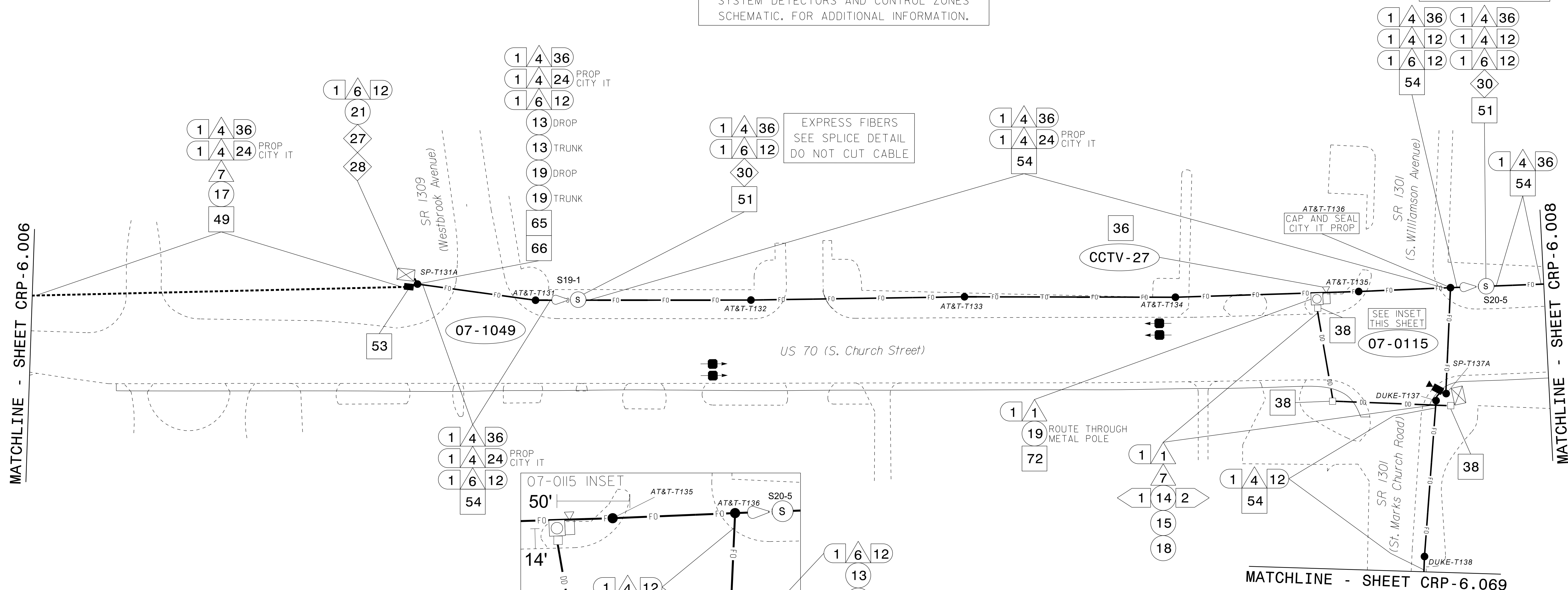






SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

EXPRESS FIBERS SEE SPLICE DETAIL DO NOT CUT CABLE



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**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 FIBERS/TWISTED PAIRS

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              |
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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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**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

REVISIONS INIT. DATE

SCALE 1"=50'

750 Greenfield Parkway, Garner, NC 27529

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOOTH 025892

Melissa B. Toth 6/13/2018

CADD File name: CL-007.dgn

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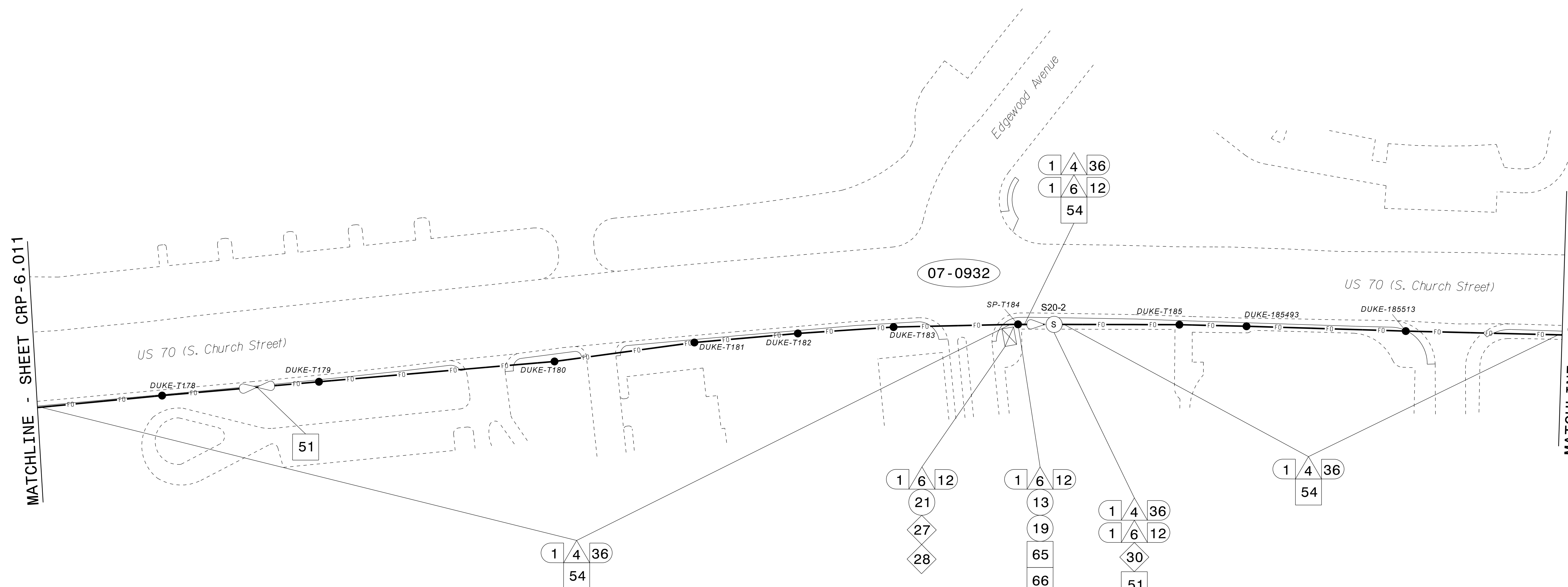












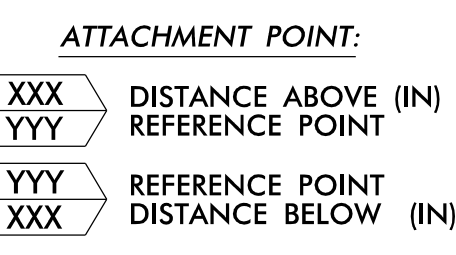
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MATCHLINE - SHEET CRP-6.013

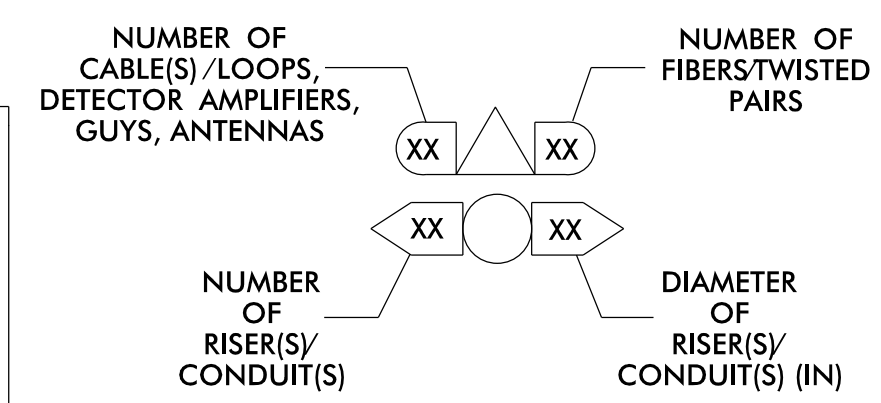
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|    |   |    |   |    |   |    |   |    |  |     |   |    |   |
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EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

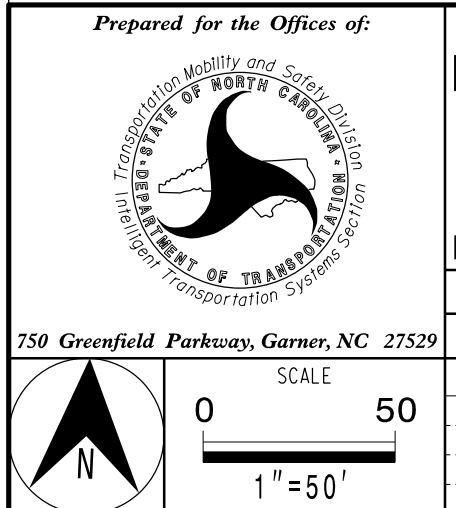


**CONSTRUCTION NOTE SYMBOLOLOGY KEY**



**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



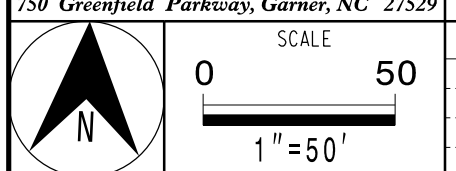
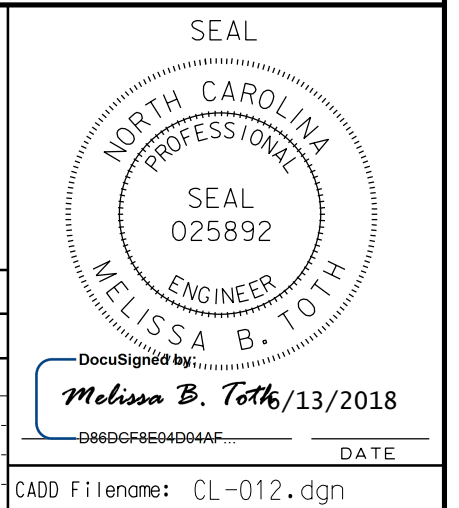
**Burlington-Graham Signal System Cable Routing Plans**

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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|           |       |      |

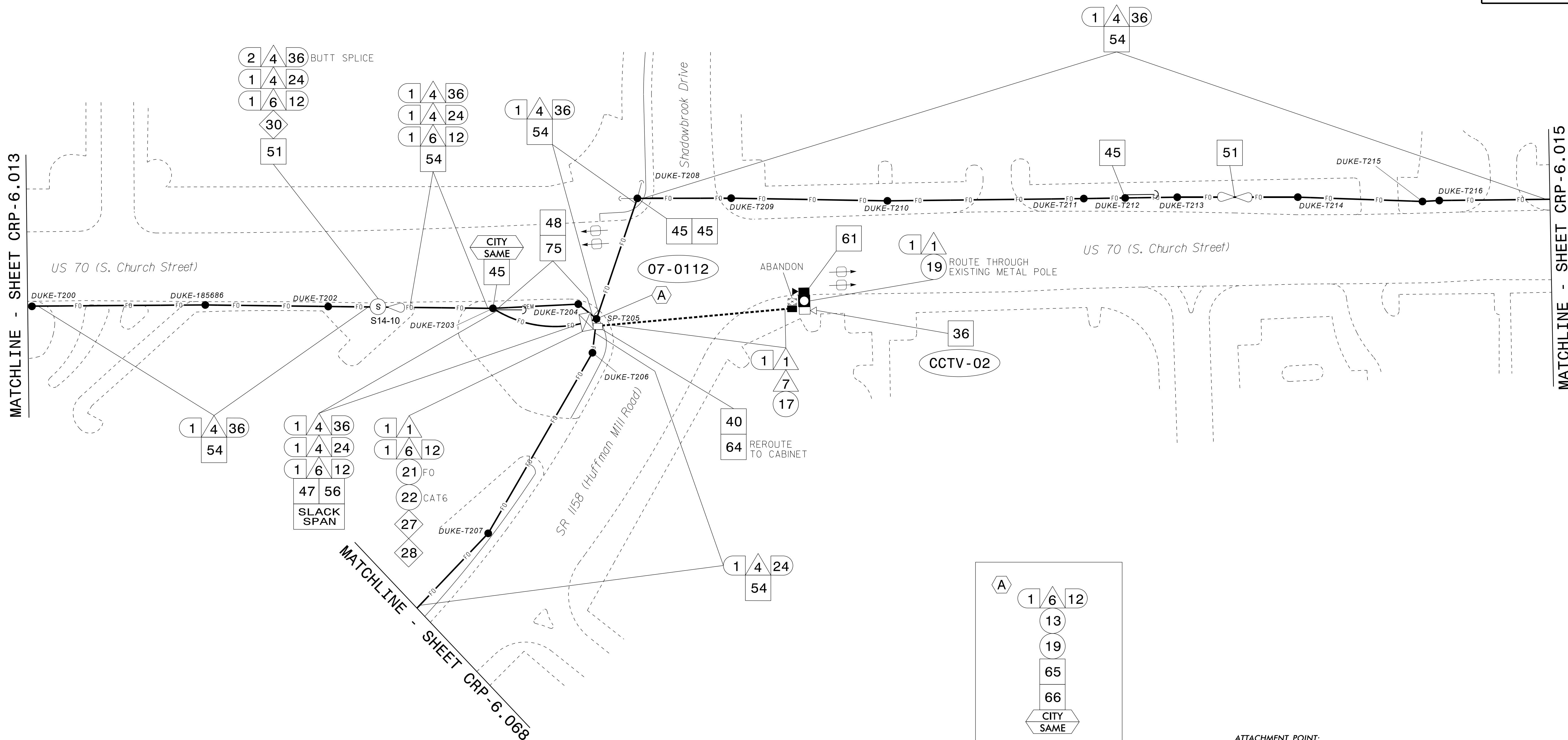


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Legend table with 10 columns of symbols and their corresponding descriptions for cable types, conduit, splicing, and equipment installation.

Technical details including 'ATTACHMENT POINT' symbols, 'CONSTRUCTION NOTE SYMBOLOLOGY KEY', 'ATKINS' logo and contact info, and project metadata for 'Burlington-Graham Signal System Cable Routing Plans'.

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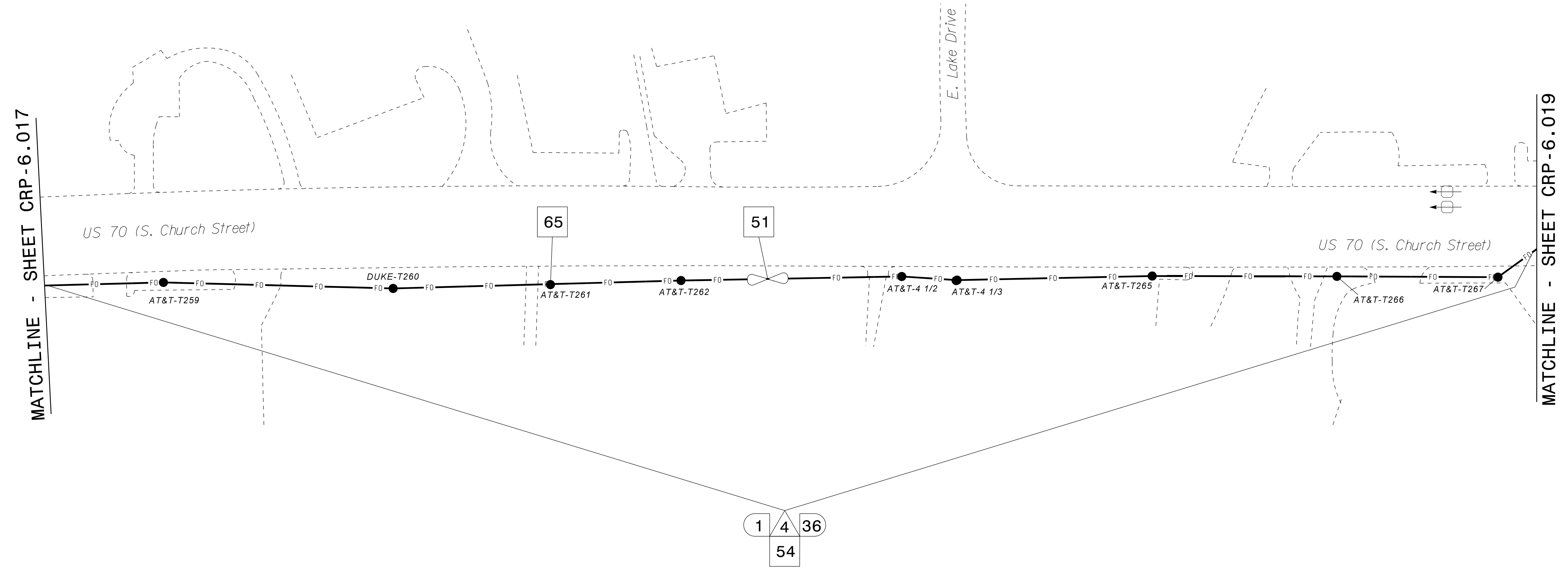




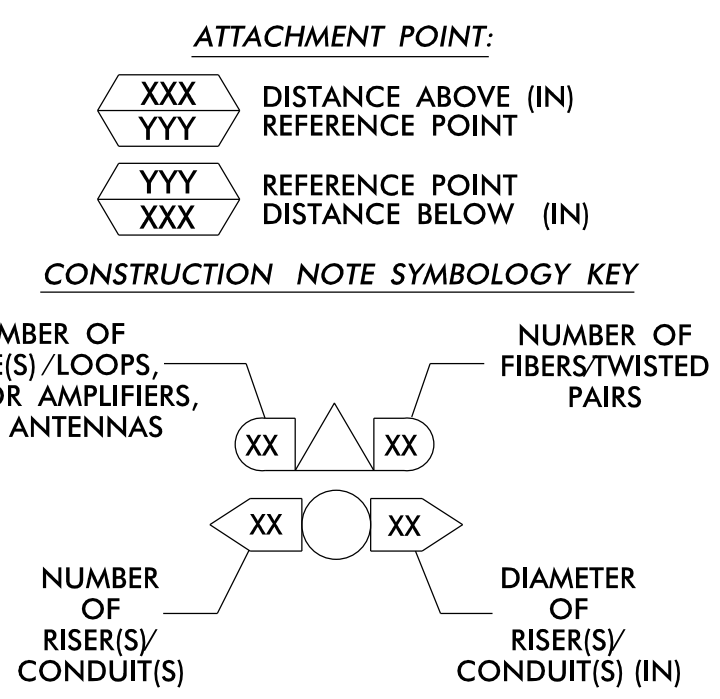




SEE SIGNAL PLAN FOR SYSTEM DETECTOR  
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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
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Prepared for the Offices of:  

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

750 Greenfield Parkway, Garner, NC 27529

SCALE: 1"=50'

REVISIONS: INIT. DATE

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

CADD File name: CL-018.dgn

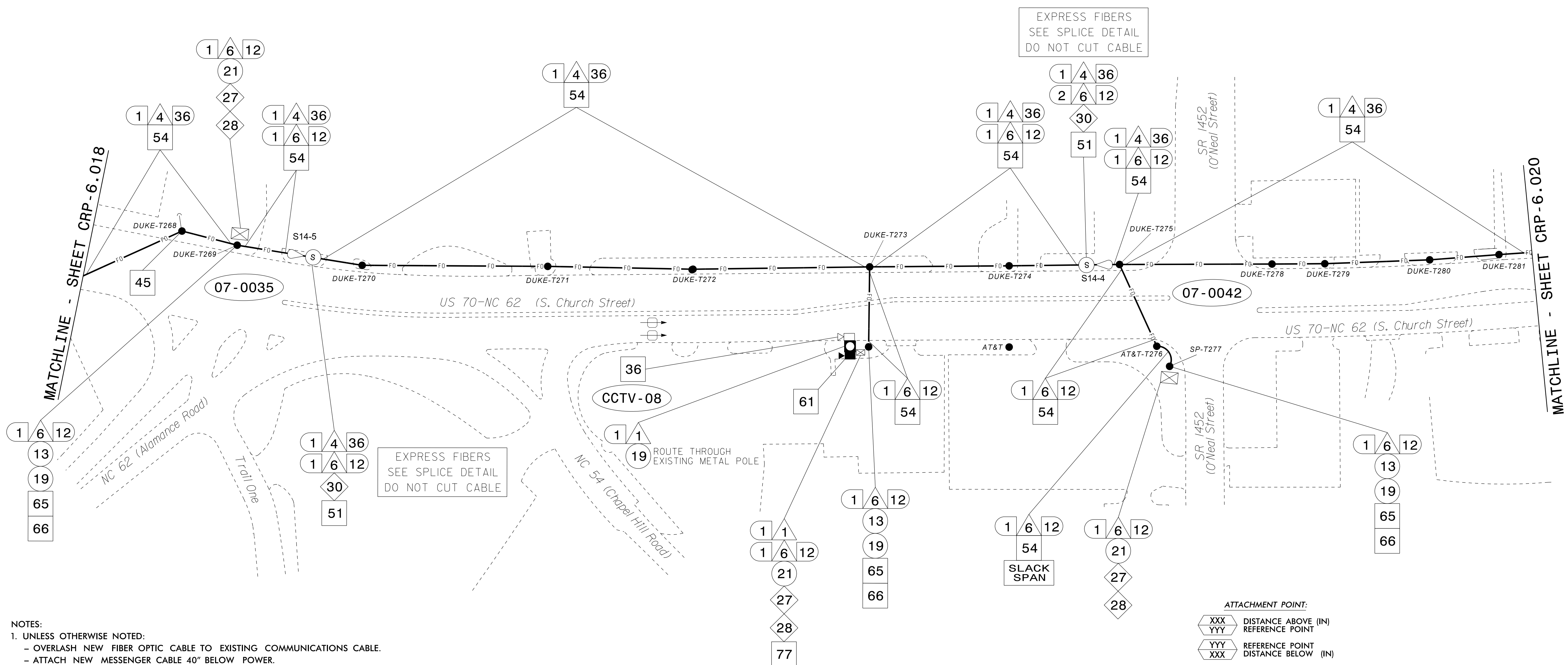
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ENC45398 AT LUS330048



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EXPRESS FIBERS SEE SPlice DETAIL DO NOT CUT CABLE

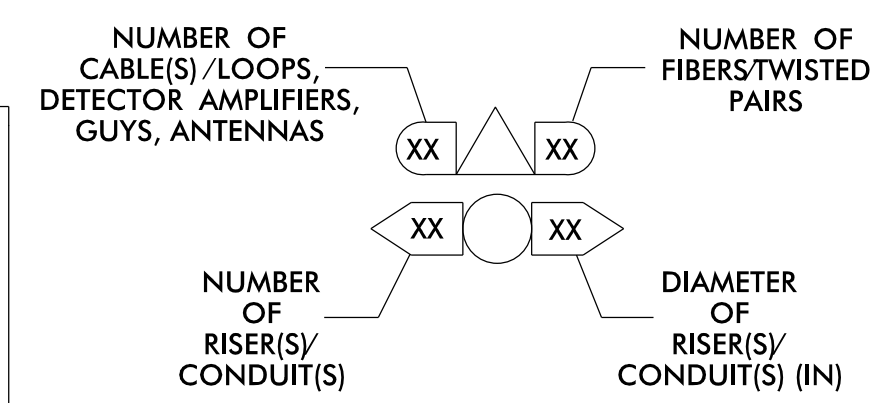
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CONSTRUCTION NOTE SYMBOLOLOGY KEY



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

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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

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SCALE 0 50 1"=50'

Melissa B. Toth 6/13/2018

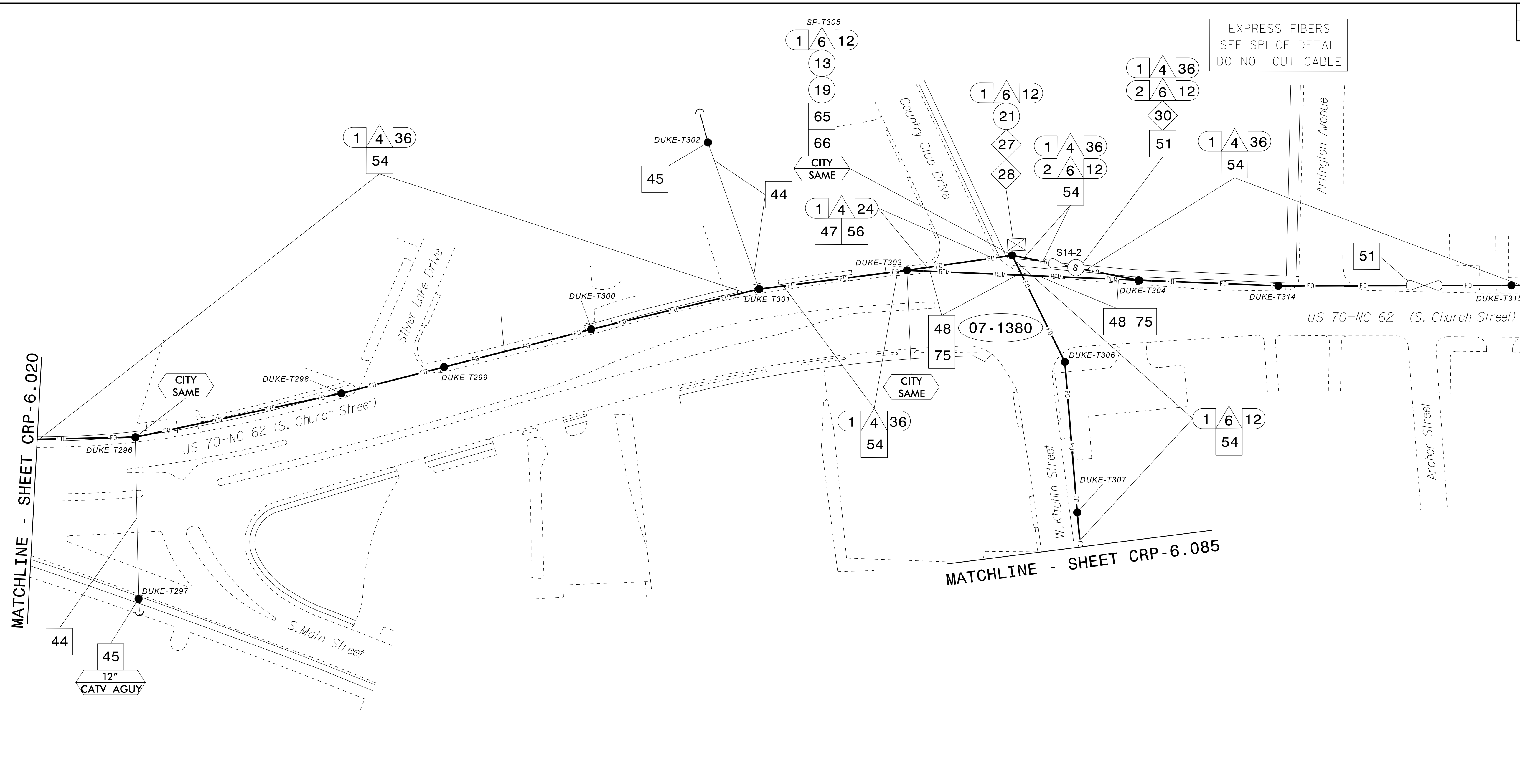
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MATCHLINE - SHEET CRP-6.020

MATCHLINE - SHEET CRP-6.022

MATCHLINE - SHEET CRP-6.085

EXPRESS FIBERS  
SEE SPLICE DETAIL  
DO NOT CUT CABLE

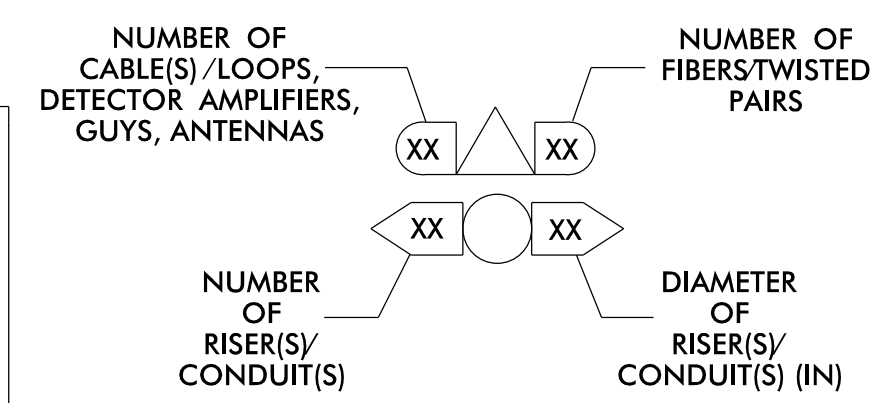
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RALEIGH, NORTH CAROLINA 27609  
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Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

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

REVISIONS INIT. DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 025892

MELISSA B. TOTH

Documented by: Melissa B. Toth/13/2018

DATE

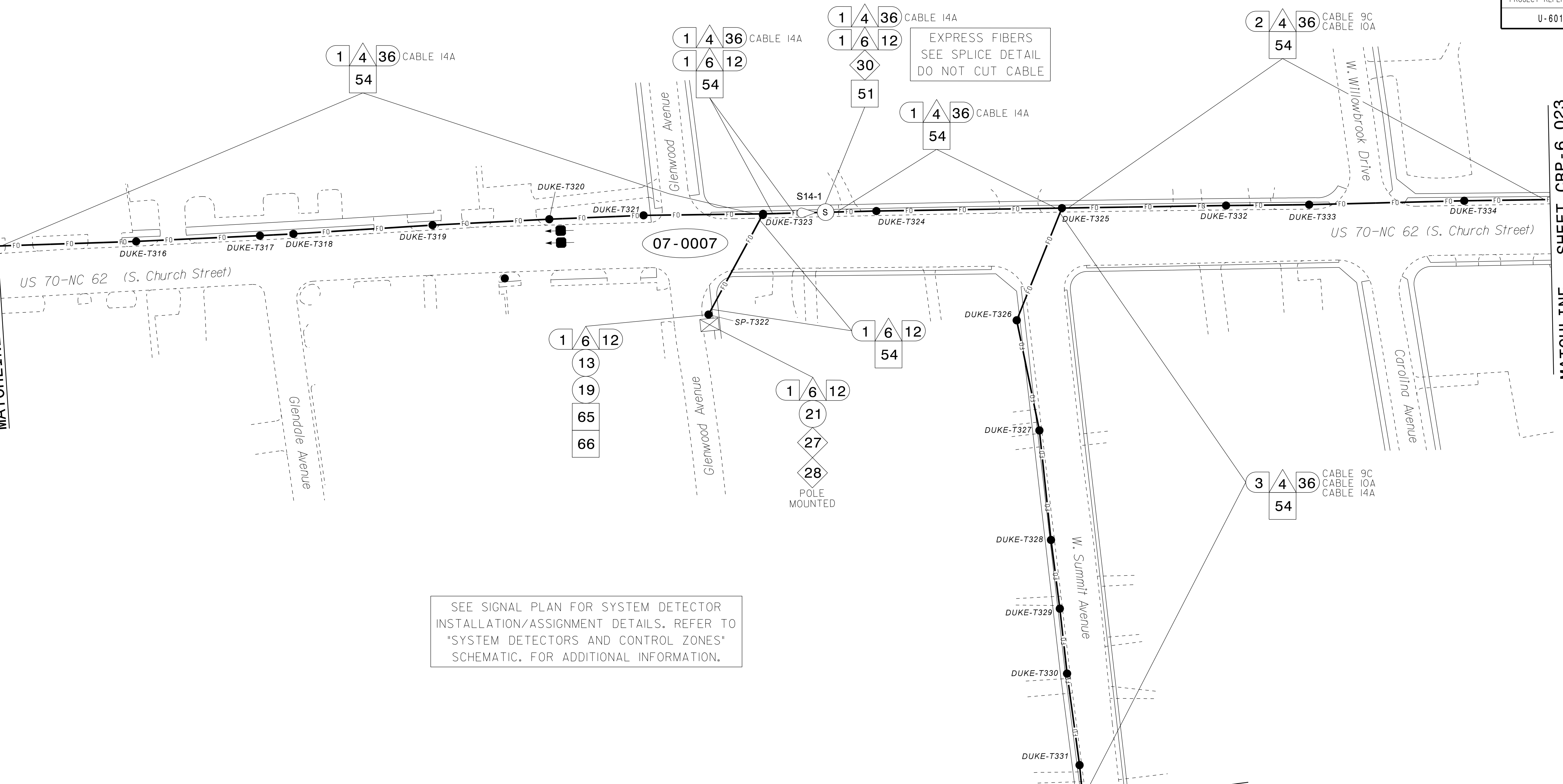
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MATCHLINE - SHEET CRP-6.021

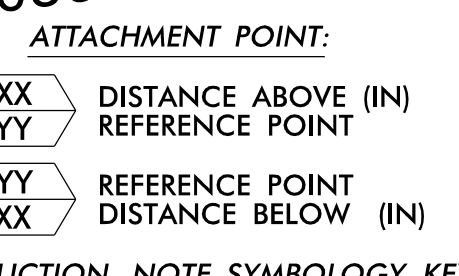
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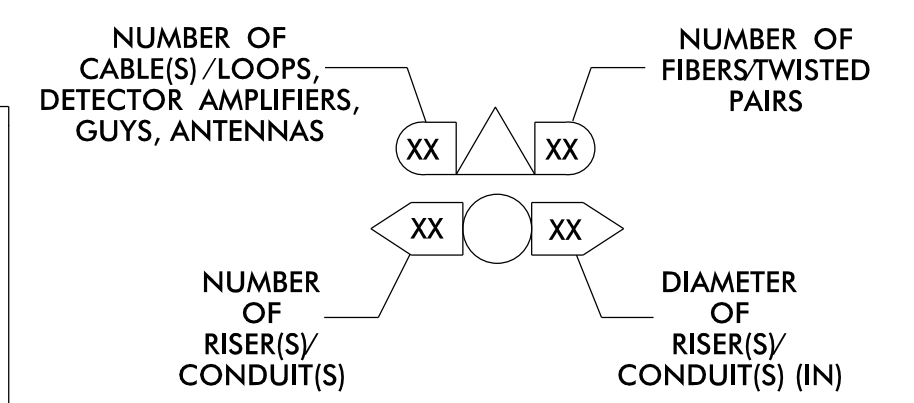
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MATCHLINE - SHEET CRP-6.086



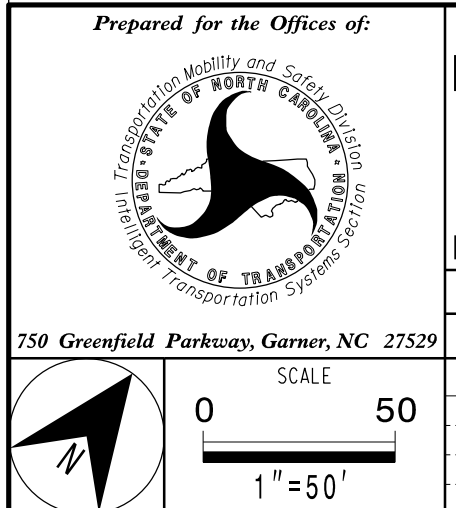
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PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

DATE

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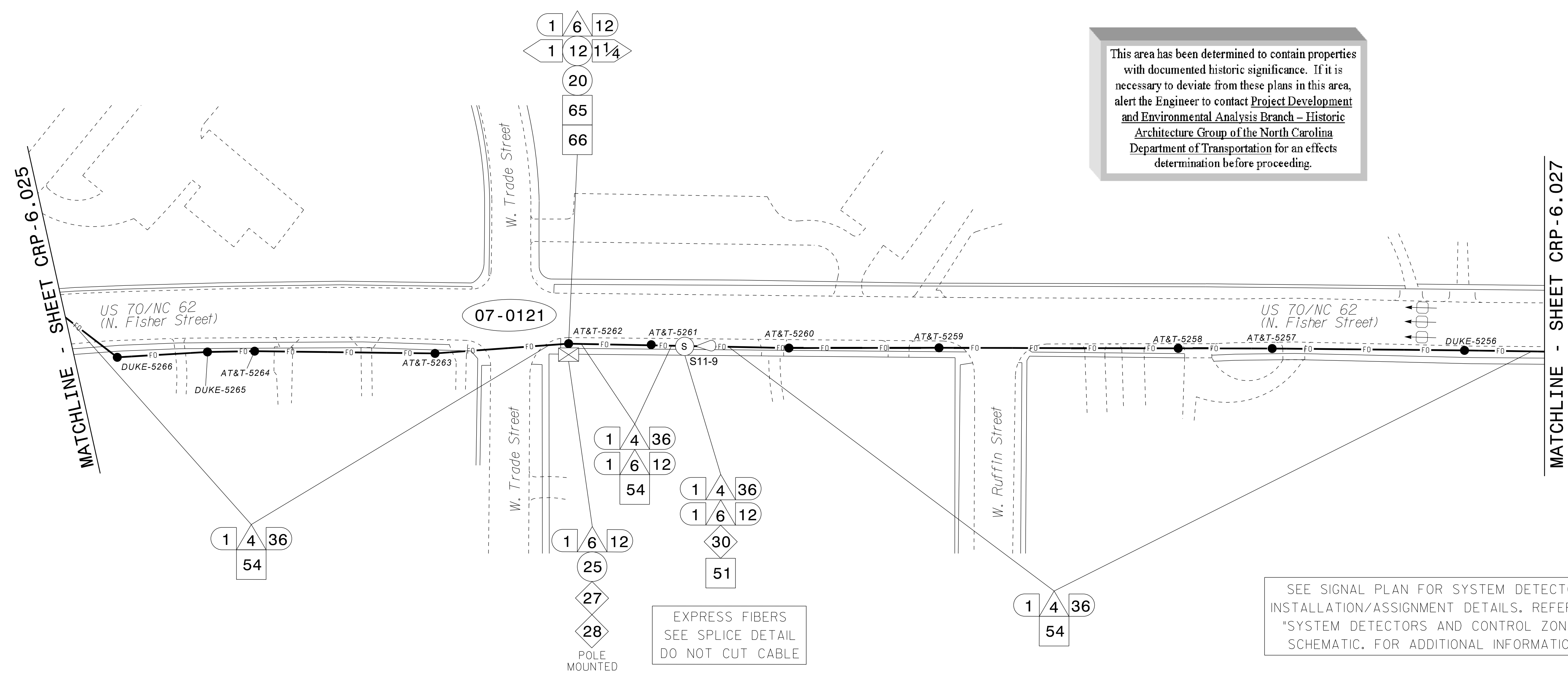








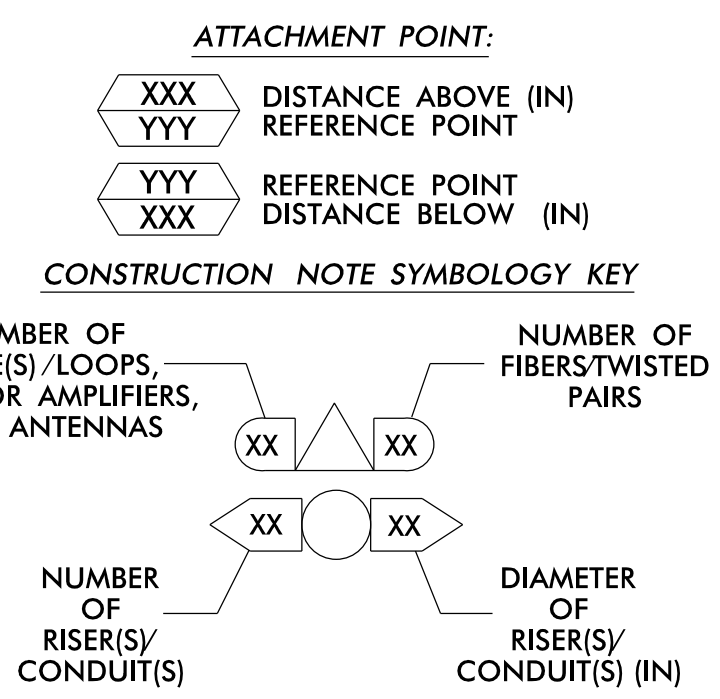




This area has been determined to contain properties with documented historic significance. If it is necessary to deviate from these plans in this area, alert the Engineer to contact Project Development and Environmental Analysis Branch - Historic Architecture Group of the North Carolina Department of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

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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:  

 State 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

SCALE: 1"=50'

REVISIONS: INIT. DATE

DocuSign by: **Melissa B. Toth** 025892 ENGINEER SEAL

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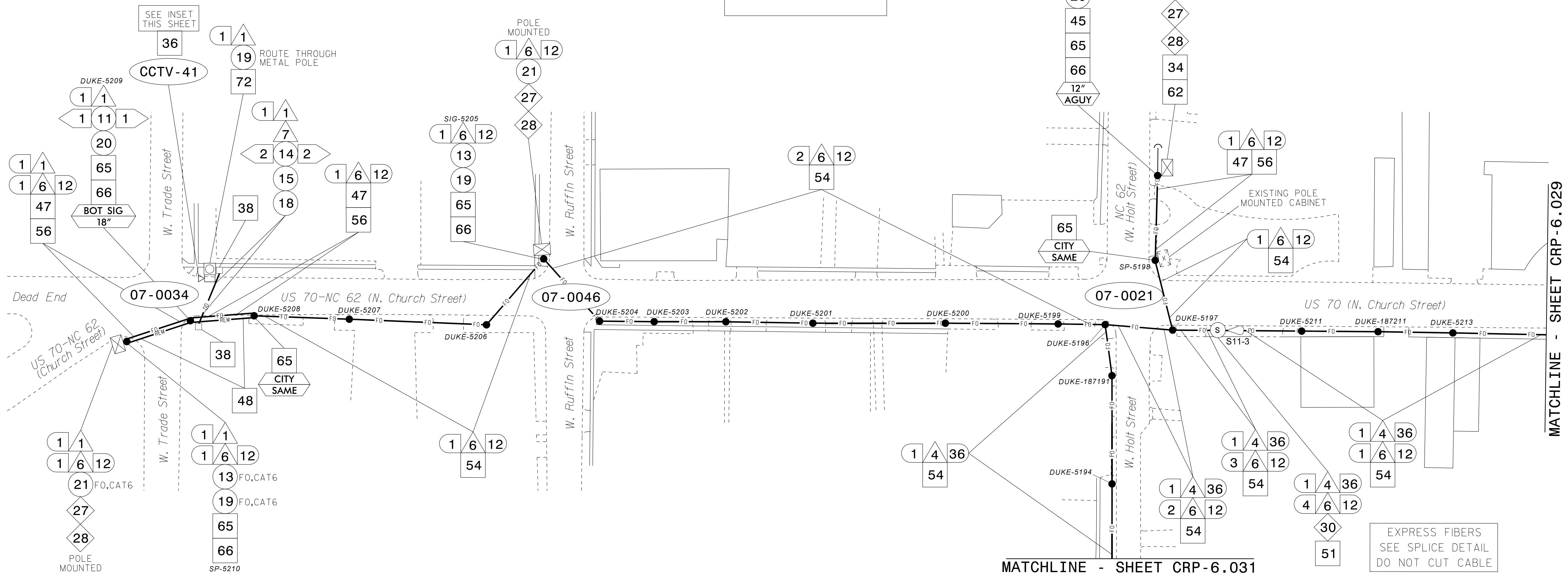
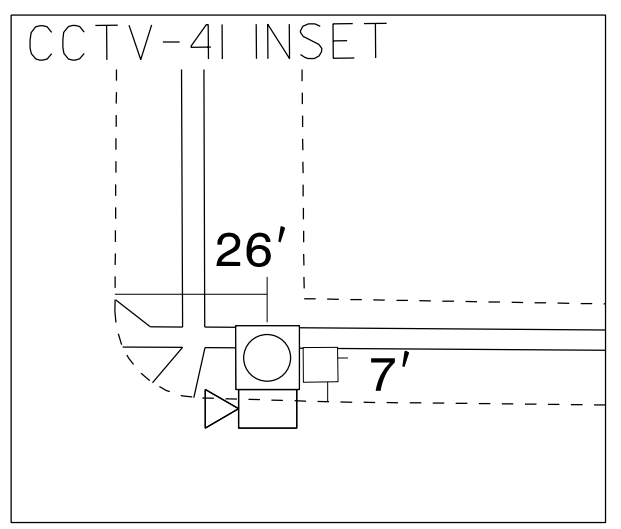
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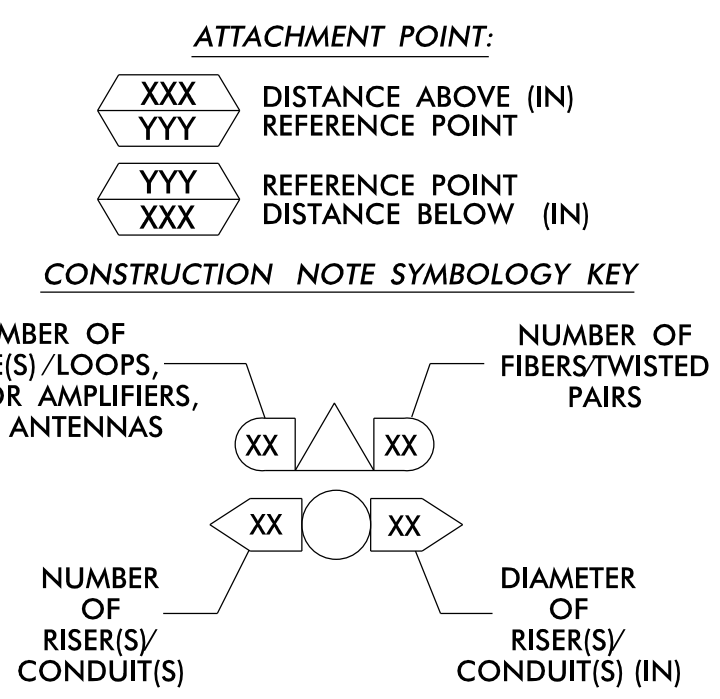








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Prepared for the Offices of: **Burlington-Graham Signal System Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

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SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

DocuSign by: Melissa B. Toth 6/13/2018

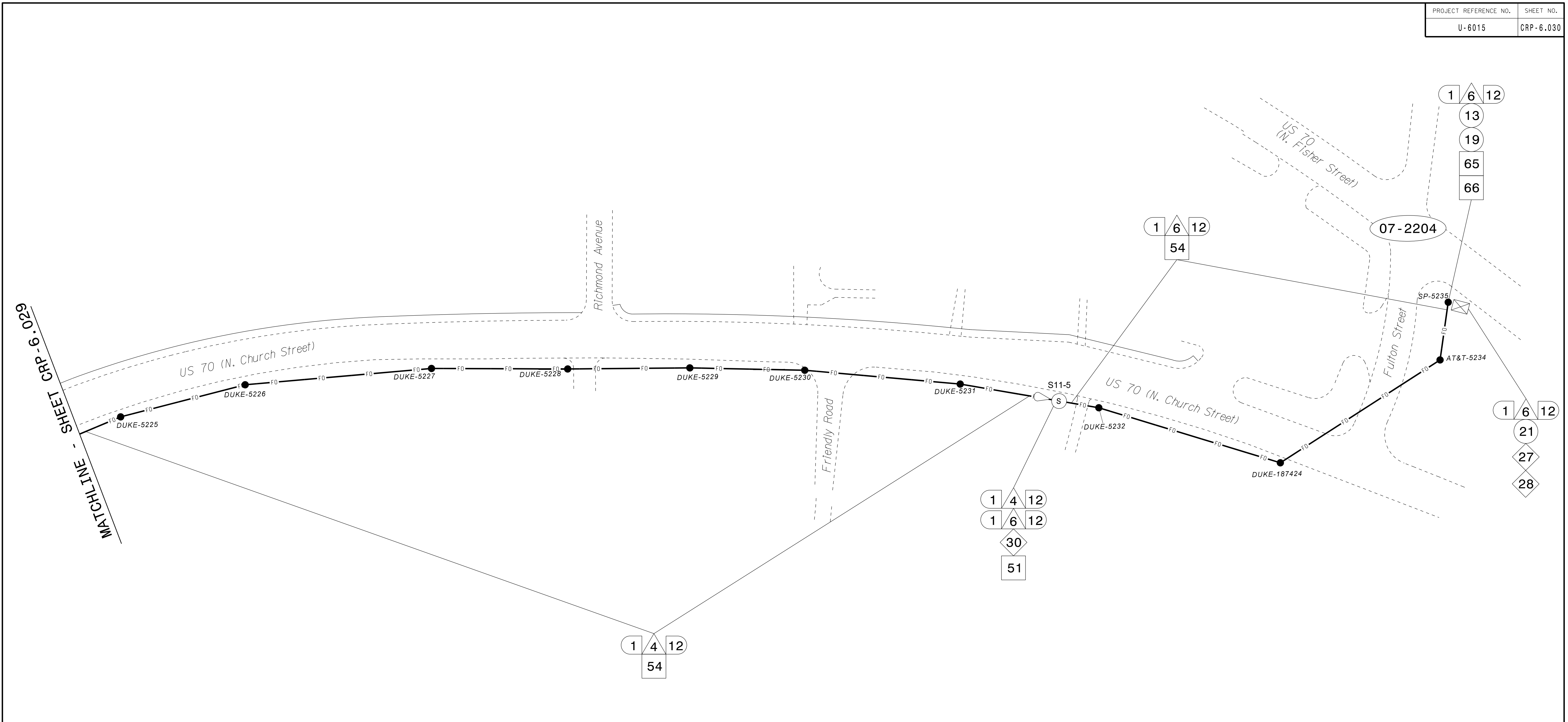
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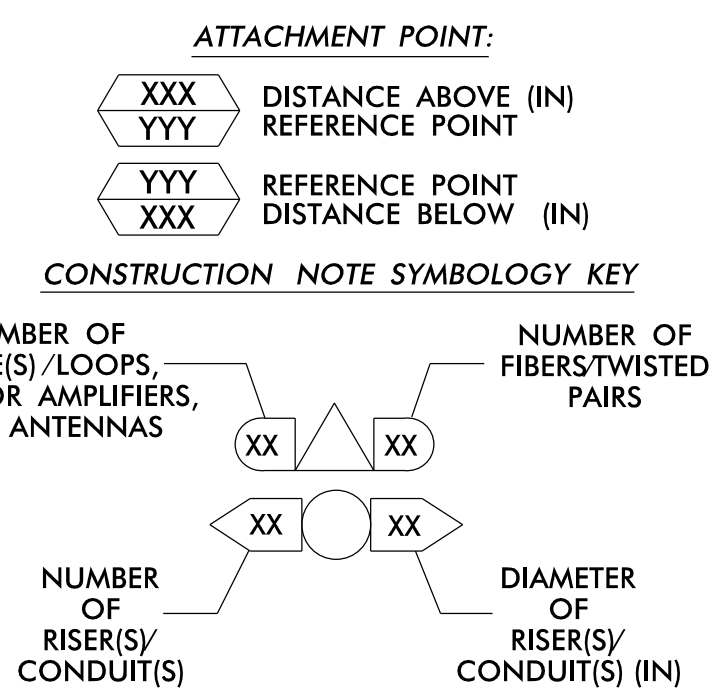








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Division 7 Alamance County Burlington & Graham

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'

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

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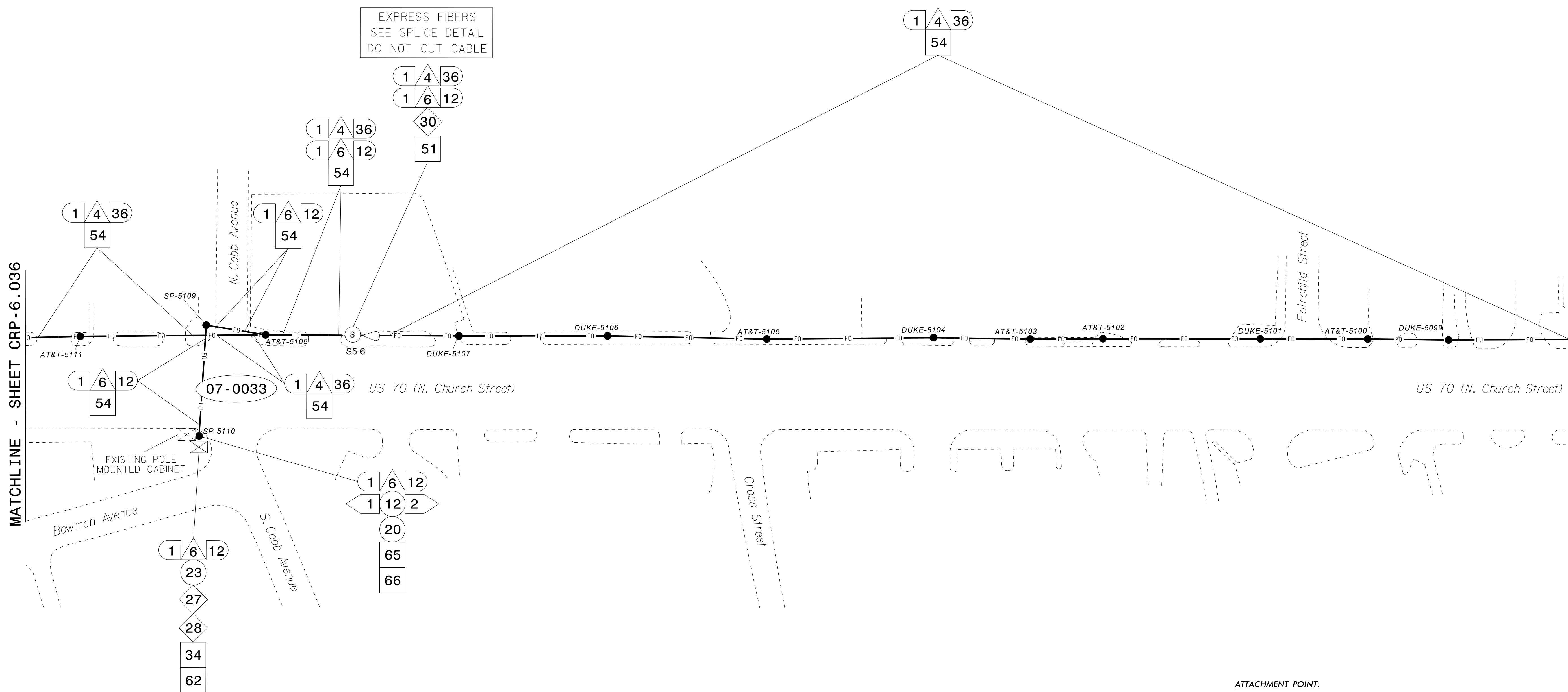




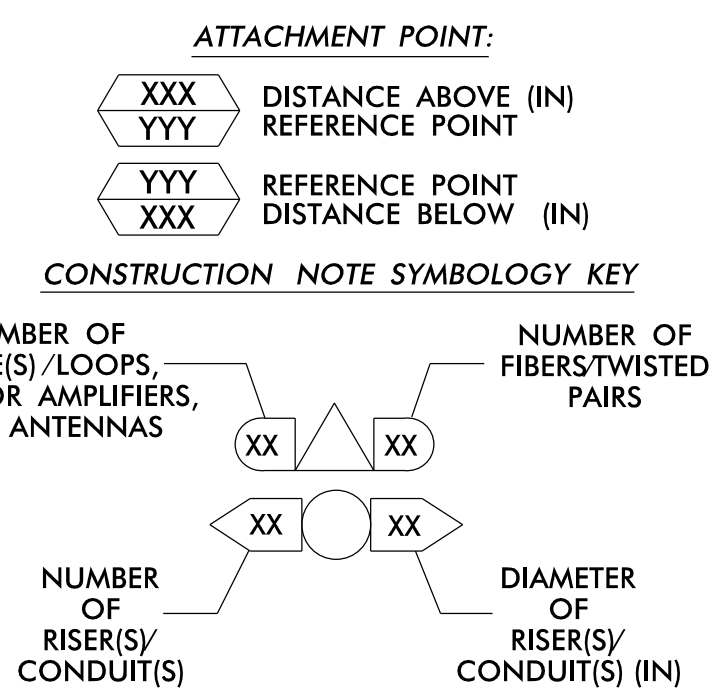








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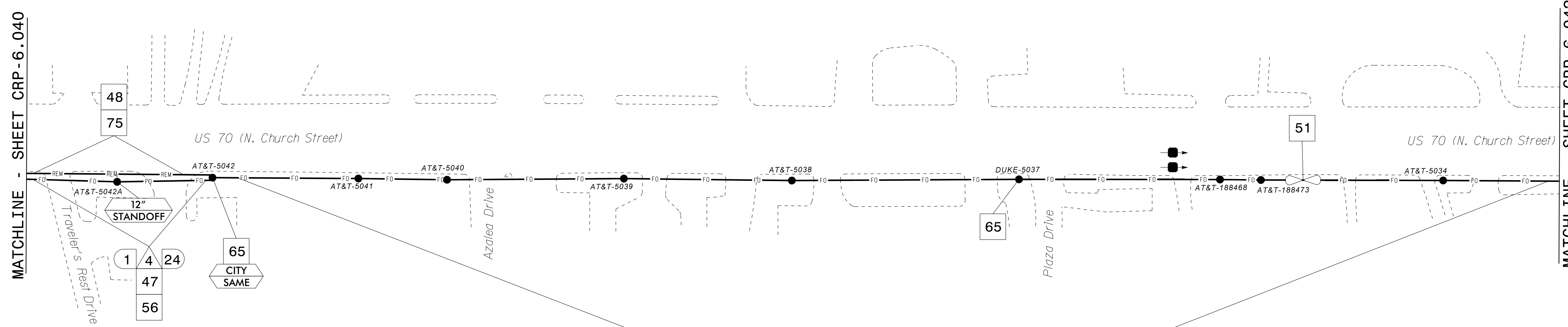












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YYY DISTANCE ABOVE (IN)  
REFERENCE POINT

YYY  
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DISTANCE BELOW (IN)

**CONSTRUCTION NOTE SYMBOLGY 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)

**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

**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'

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

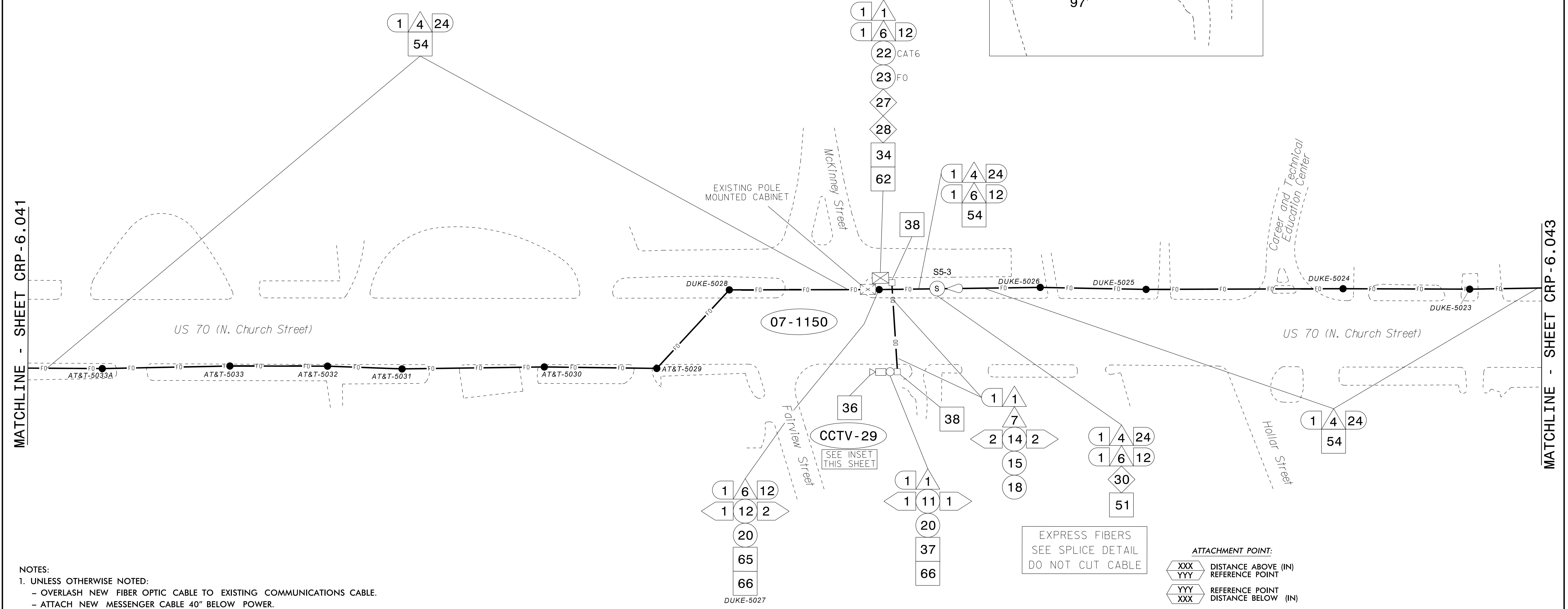
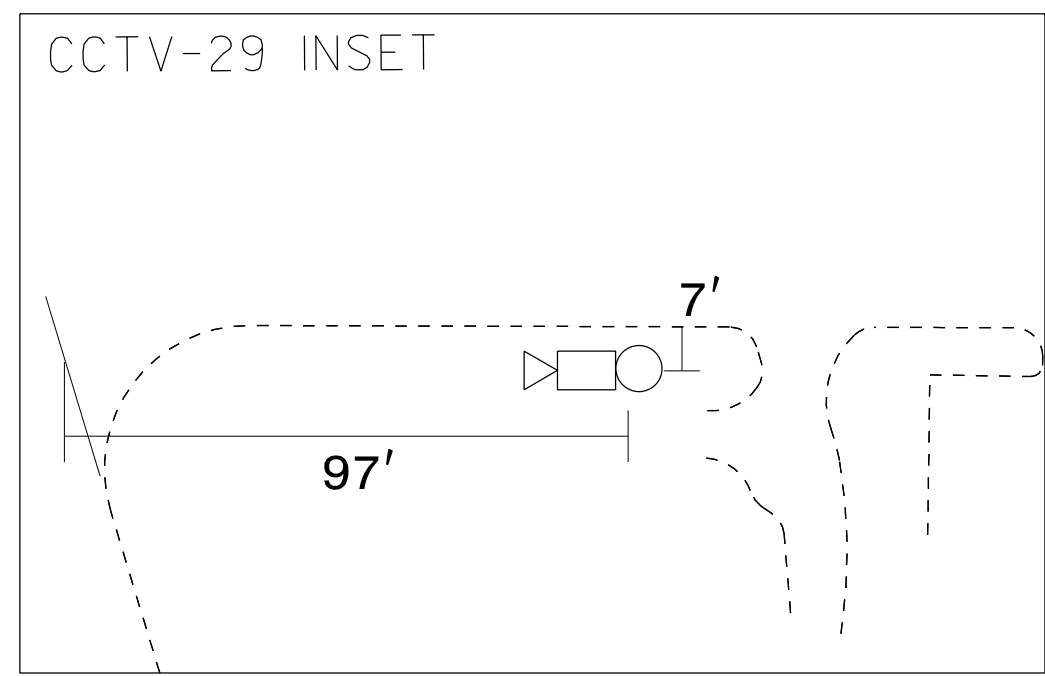
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|    |   |    |   |    |   |    |   |    |  |     |   |    |   |
|----|---|----|---|----|---|----|---|----|--|-----|---|----|---|
| 1  | INSTALL CATEGORY 6 CABLE                | 11 | INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD        | 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             |
| 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             |
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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               |    |   |
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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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    - 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.

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 SYMBOLOLOGY KEY

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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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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 BJ Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

Melissa B. Toth 6/13/2018

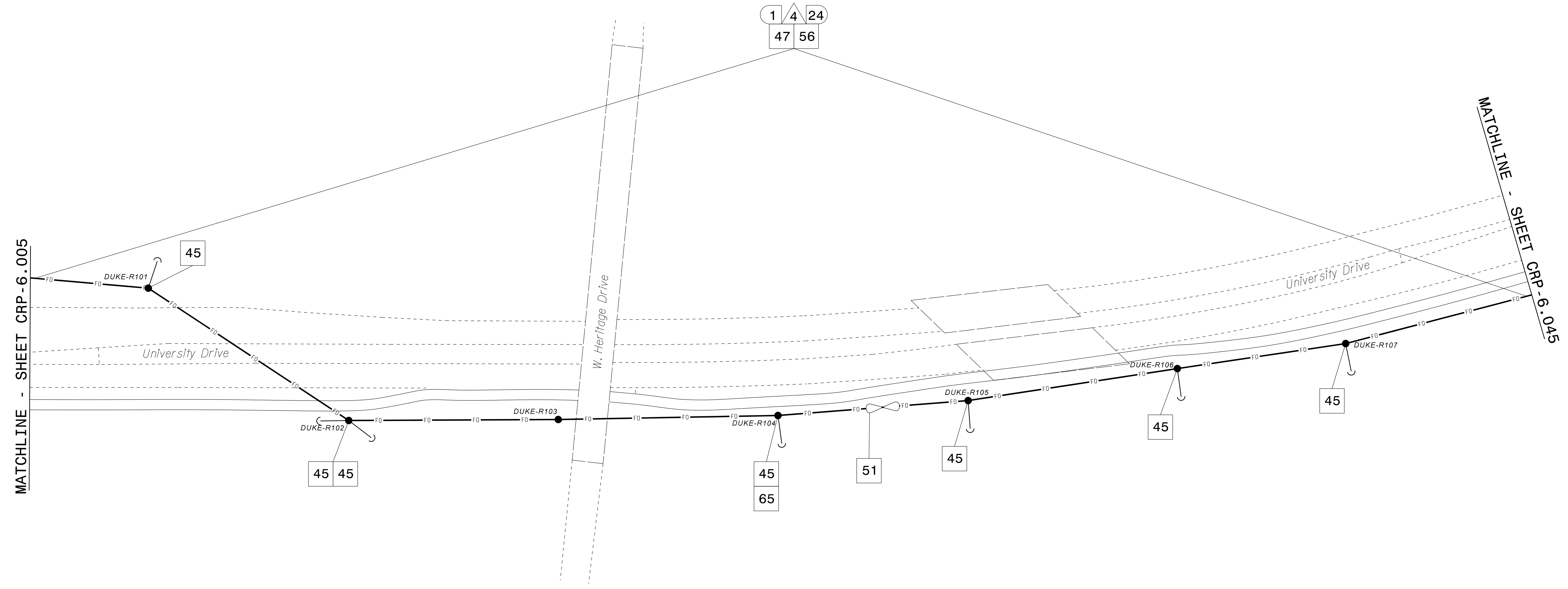
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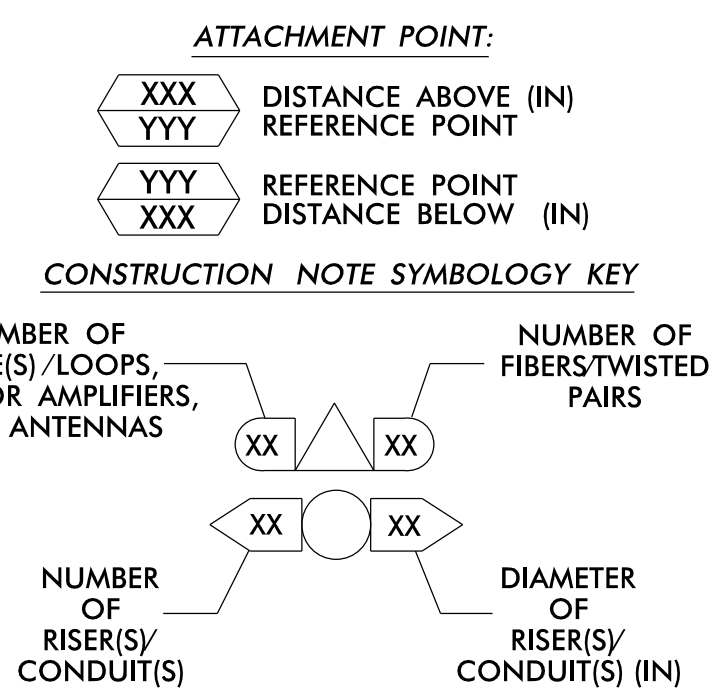








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**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160  
 RALEIGH, NORTH CAROLINA 27609  
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**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

**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'

750 Greenfield Parkway, Garner, NC 27529

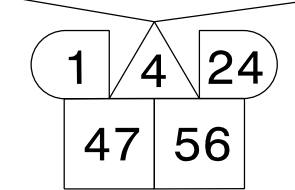
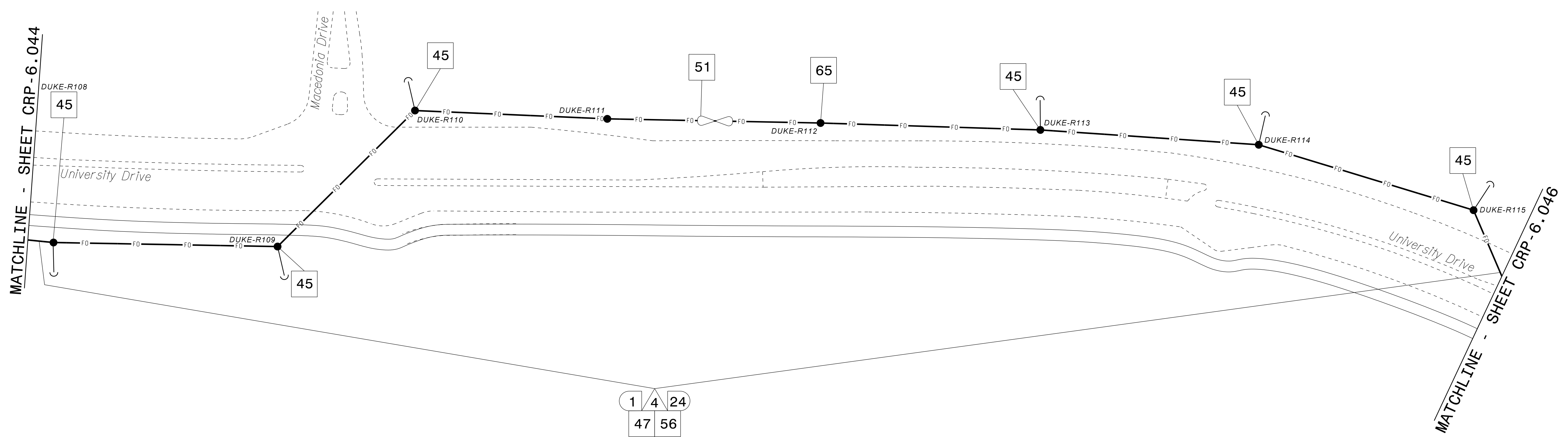
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

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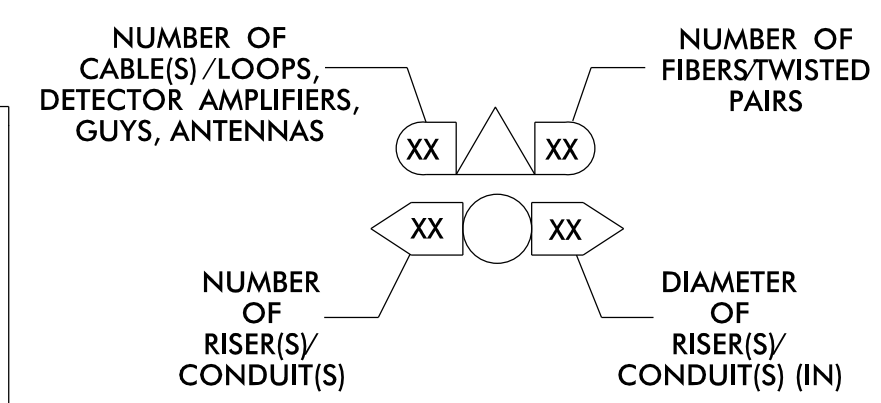
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 ENCA5396 AT LUS330048





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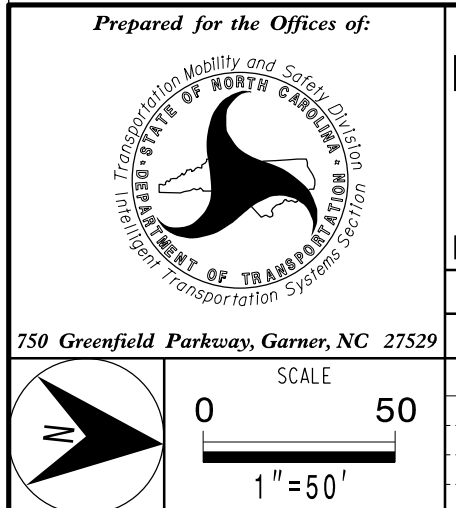
ATTACHMENT POINT:  
XXX  
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REFERENCE POINT  
YYY  
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ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160  
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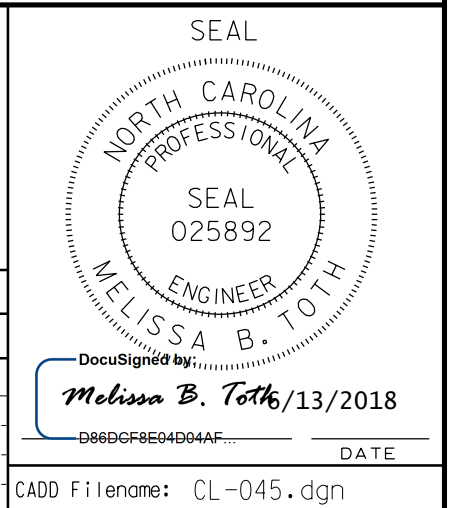
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|  |  |  | 42 INSTALL WOOD POLE                                       | 53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)                                 | 64 INTERCEPT AND REROUTE EXISTING CONDUITS               | 76 INSTALL 2.4 GHZ RADIO AND PANEL 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) |



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 |
| REVISIONS            | INIT.                            | DATE                  |

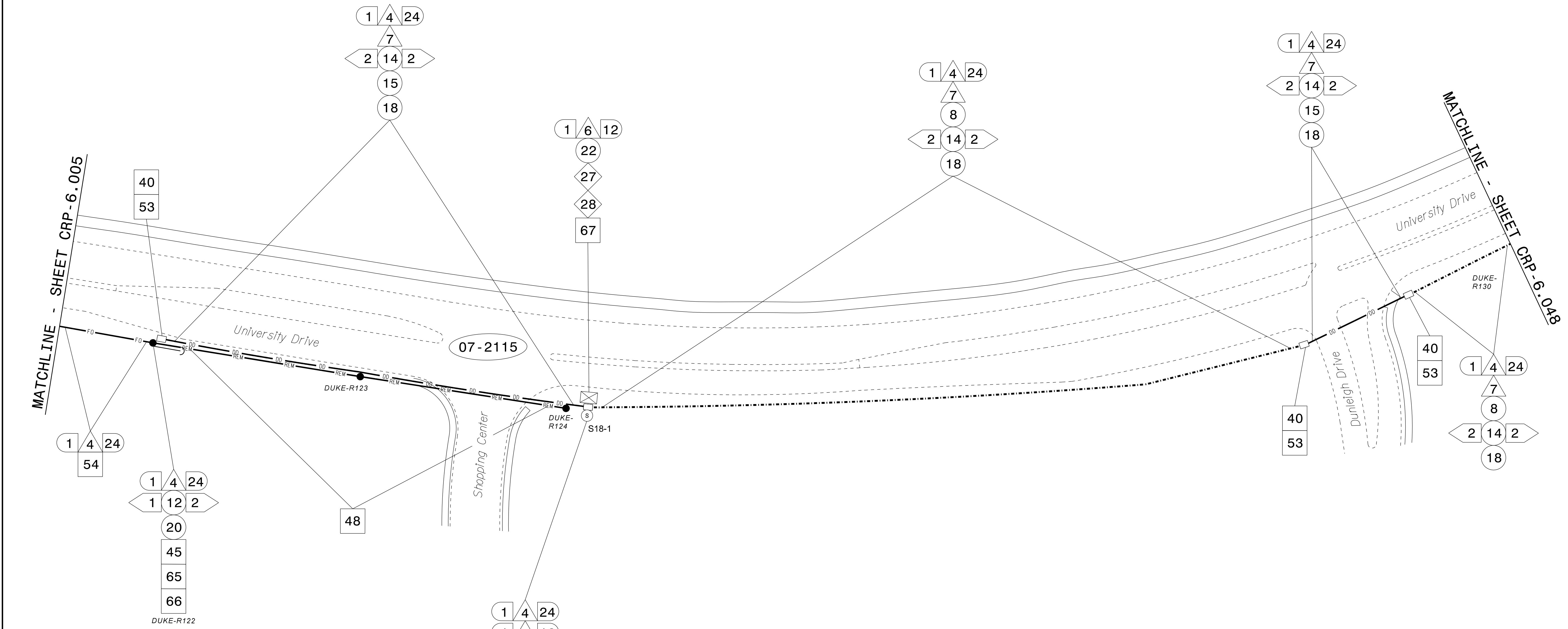


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**NOTES:**  
 1. UNLESS OTHERWISE NOTED:  
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.  
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.  
 - ATTACH ON FRONT SIDE (FS) OF POLE.  
 2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT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

EXPRESS FIBERS  
 SEE SPLICE DETAIL  
 DO NOT CUT CABLE

**ATTACHMENT POINT:**  
 XXX DISTANCE ABOVE (IN)  
 YYY REFERENCE POINT  
 YYY REFERENCE POINT  
 XXX DISTANCE BELOW (IN)  
**CONSTRUCTION NOTE SYMBOLOLOGY 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                       |
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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: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth 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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