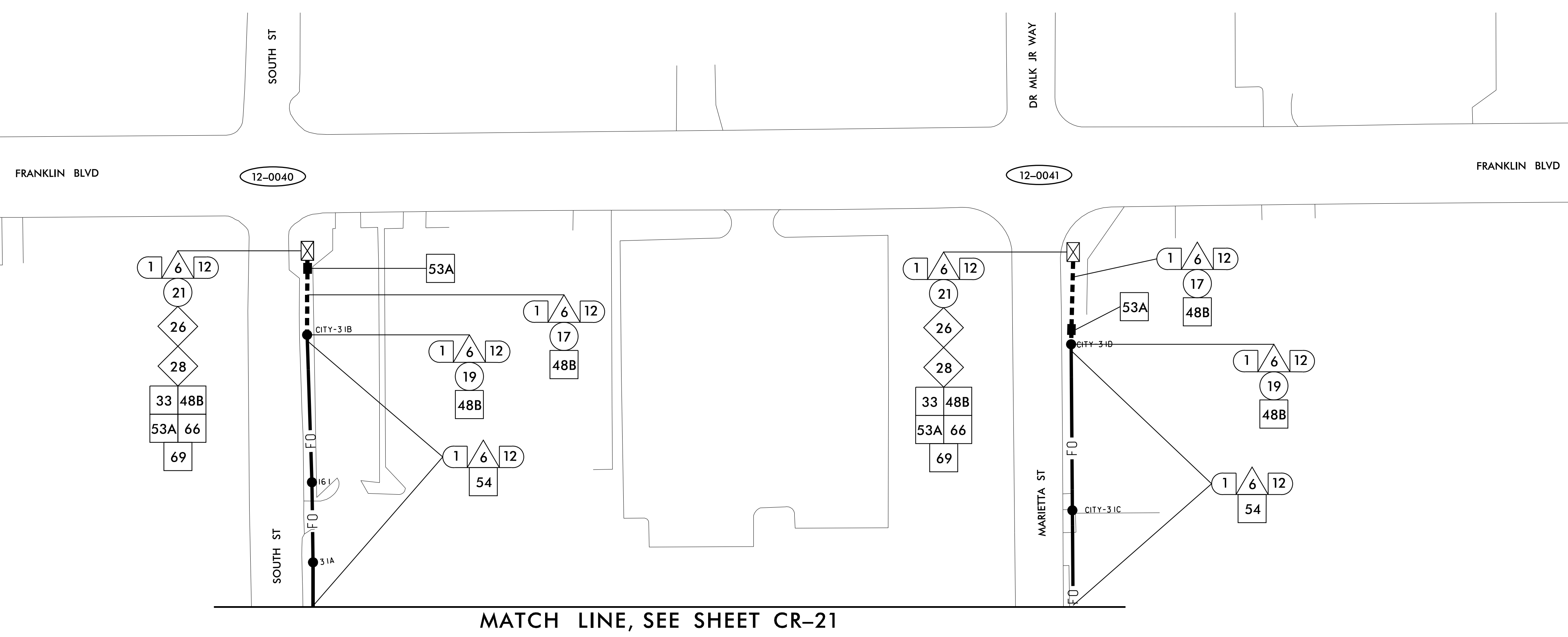


MATCH LINE, SEE SHEET CR-30

MATCH LINE, SEE SHEET CR-32

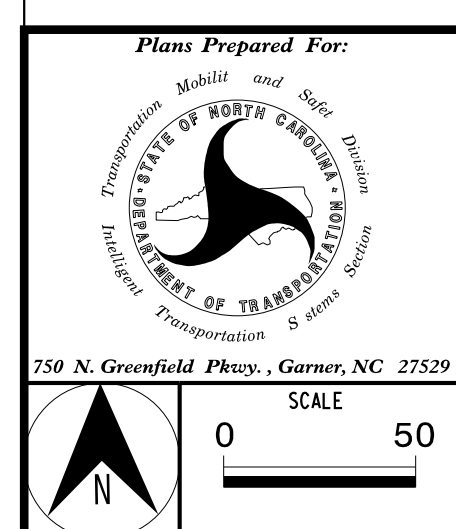


MATCH LINE, SEE SHEET CR-21

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

Scale: 0 50

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**North Carolina Professional Engineer**

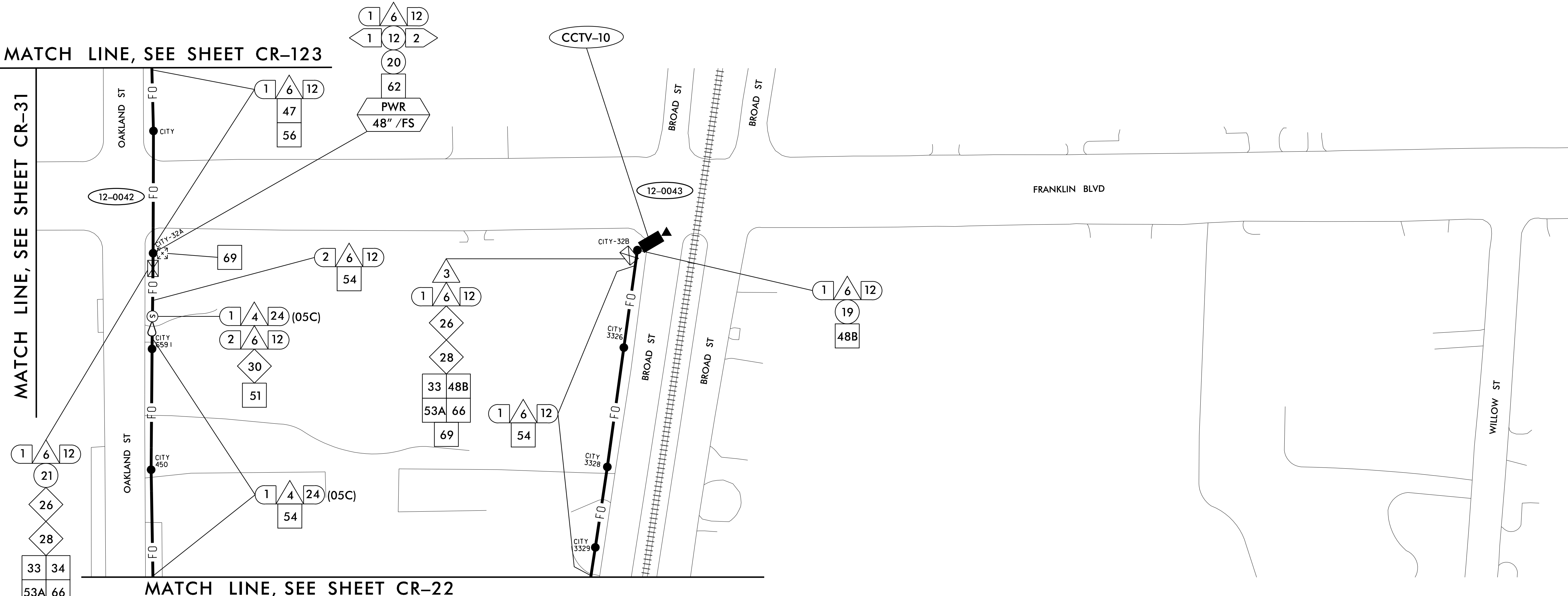
028952

I. Van Osdel

3/18/2022

CADD File name:

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH031\_CR.dgn



MATCH LINE, SEE SHEET CR-123

MATCH LINE, SEE SHEET CR-31

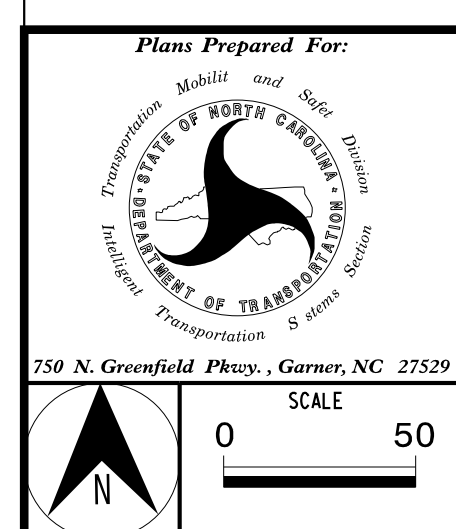
MATCH LINE, SEE SHEET CR-33

MATCH LINE, SEE SHEET CR-22

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



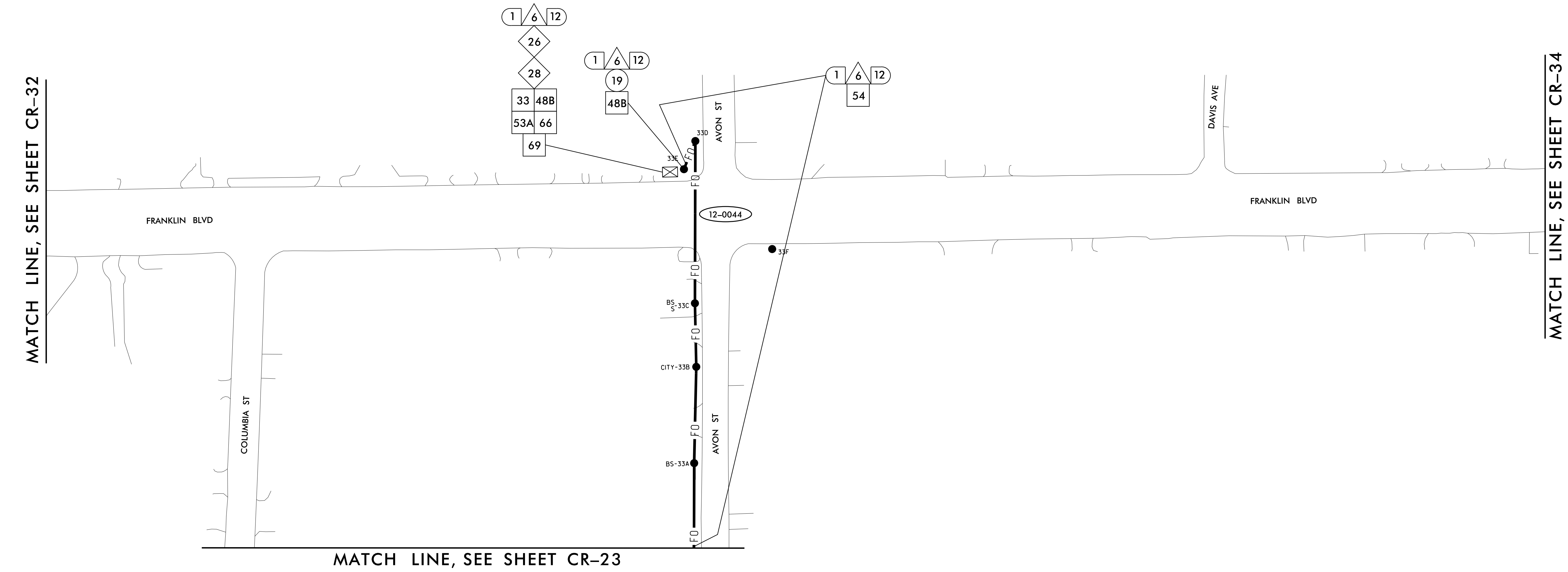
<b>CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN</b>	
DIVISION 12	GASTON COUNTY
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT. DATE

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 IGER VAN OSDELL  
 3/18/2022  
 CADD Filename: \_\_\_\_\_

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH032\_CR.dgn





MATCH LINE, SEE SHEET CR-32

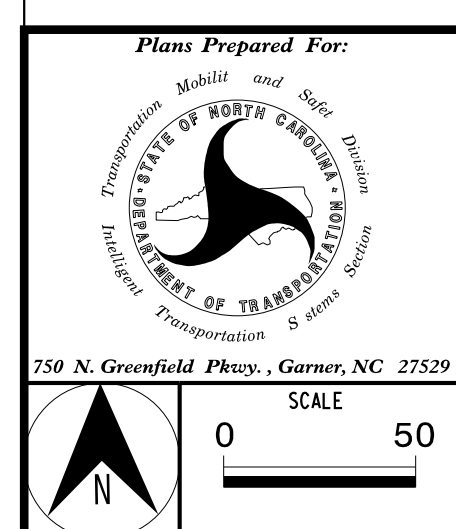
MATCH LINE, SEE SHEET CR-34

MATCH LINE, SEE SHEET CR-23

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

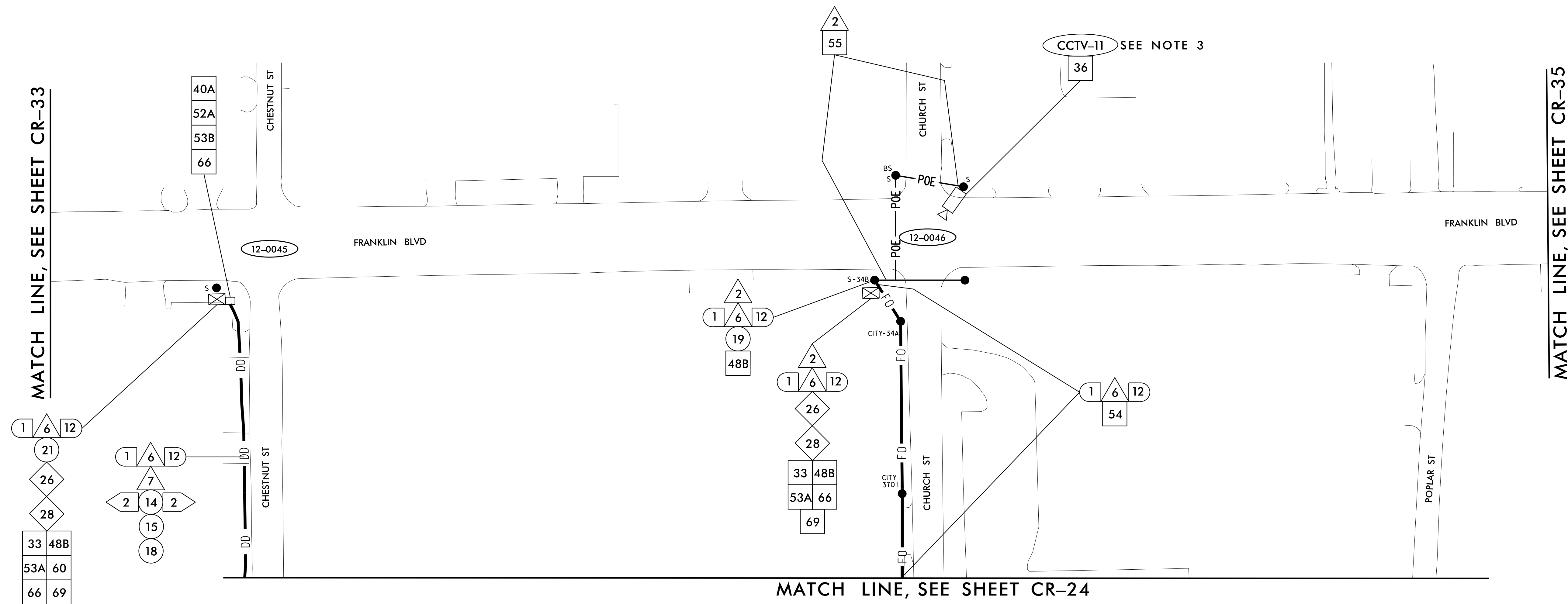
SEAL

**North Carolina Professional Engineer**  
I. VAN OSDELL  
No. 27601

DocuSigned by:  
Igor Van OsdeLL  
3/18/2022

CADD File name:

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH033\_CR.dgn



MATCH LINE, SEE SHEET CR-33

MATCH LINE, SEE SHEET CR-35

MATCH LINE, SEE SHEET CR-24

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL CCTV CAMERA 12" BELOW TOP OF POLE. SEE ITS-13.

Plans Prepared For:  
  
 250 N. Greenfield Place, Garner, NC 27529  
 SCALE 0 50

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY  
 PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH  
 PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

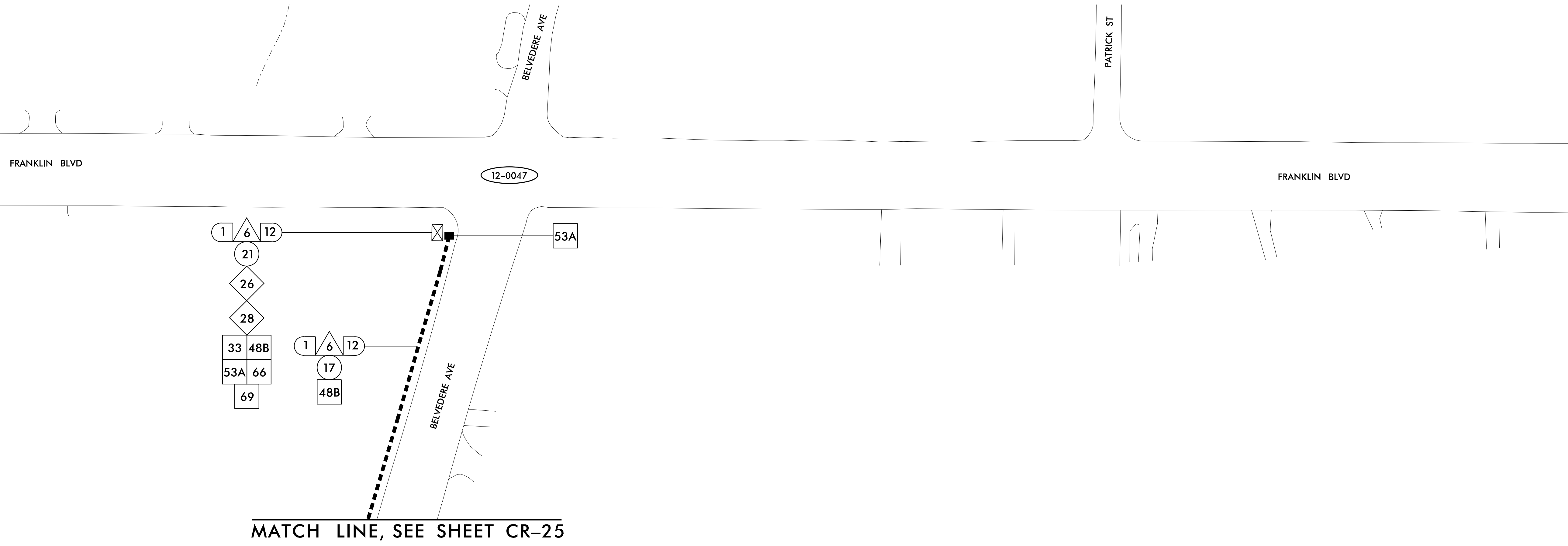
SEAL  
  
 I. Van Osdel  
 3/18/2022  
 CADD Filename: \_\_\_\_\_

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT034\_CR.dgn



MATCH LINE, SEE SHEET CR-34

MATCH LINE, SEE SHEET CR-36

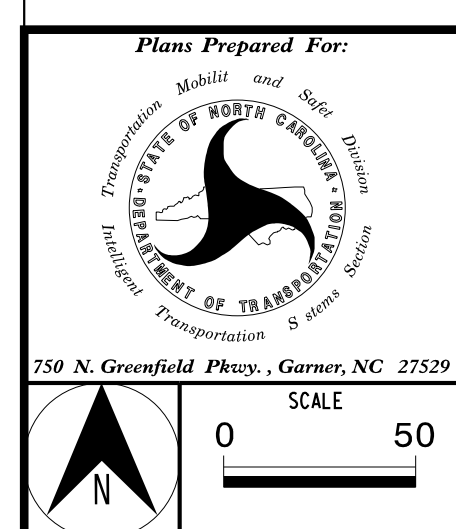


MATCH LINE, SEE SHEET CR-25

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

Scale: 0 to 50 feet

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**North Carolina Professional Engineer Seal**  
No. 028952  
I. VAN OSDELL

DocuSigned by:  
**Inger Van OsdeLL** 3/18/2022

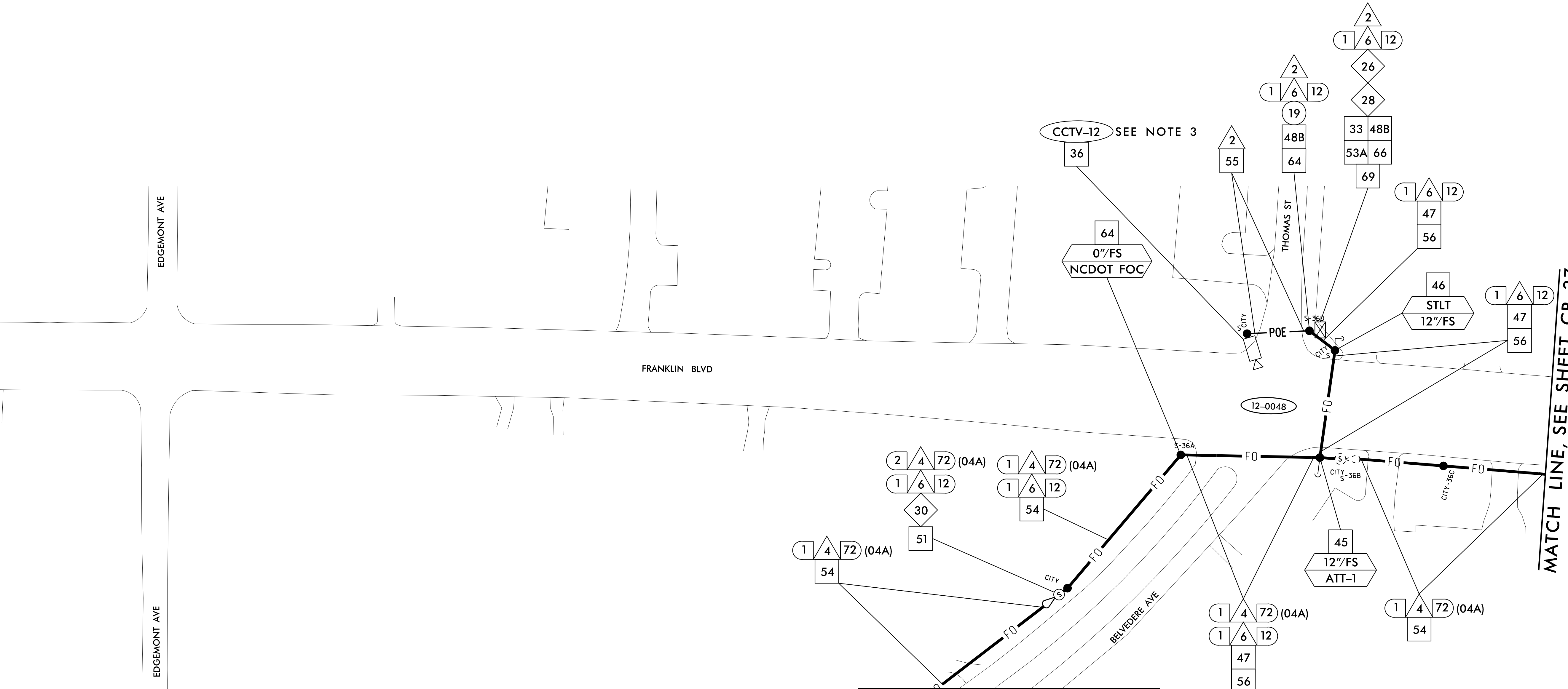
CADD File name:

3/17/2022 K:\RAL\TPTD\ITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH035\_CR.dgn

MATCH LINE, SEE SHEET CR-35

MATCH LINE, SEE SHEET CR-37

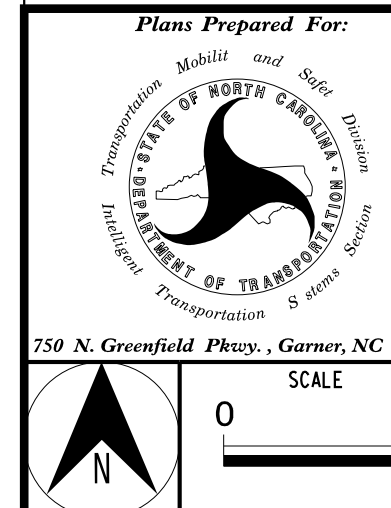
MATCH LINE, SEE SHEET CR-26



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL CCTV CAMERA 12" BELOW TOP OF POLE. SEE ITS-13.



**Plans Prepared For:**  
CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN

**DIVISION 12** GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

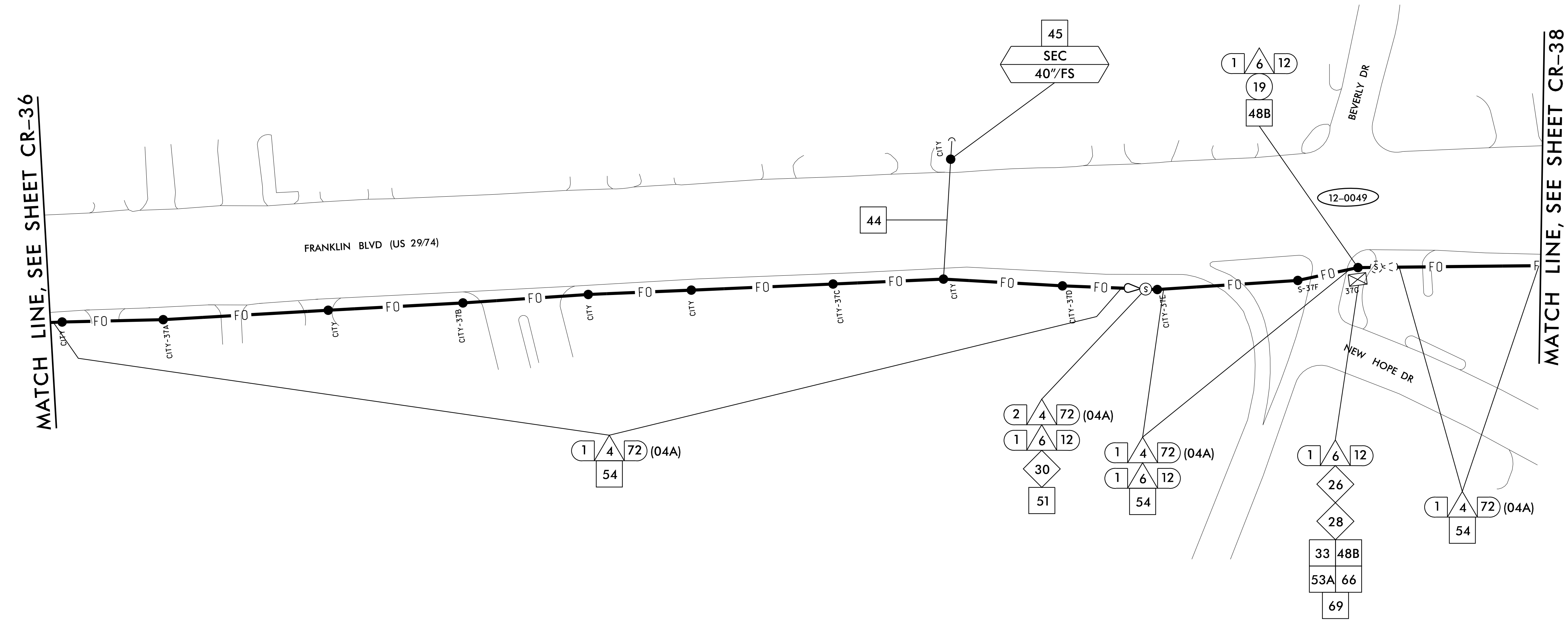
REVISIONS	INIT.	DATE

**Kimley»Horn**  
NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 028952  
ROGER Z. VAN OSDEL  
DATE: 3/18/2022  
CADD File name:

3/17/2022  
K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SHT036\_CR.dgn





MATCH LINE, SEE SHEET CR-36

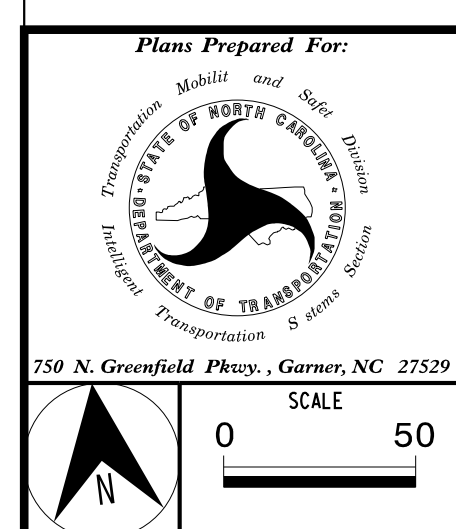
MATCH LINE, SEE SHEET CR-38

3/17/2022 K:\ARL\TPTD\ITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH037\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

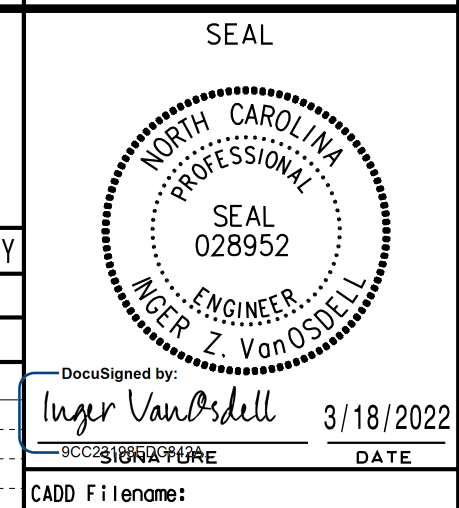
SCALE: 0 50

DocuSign by: *Inger Van Osdel* 3/18/2022

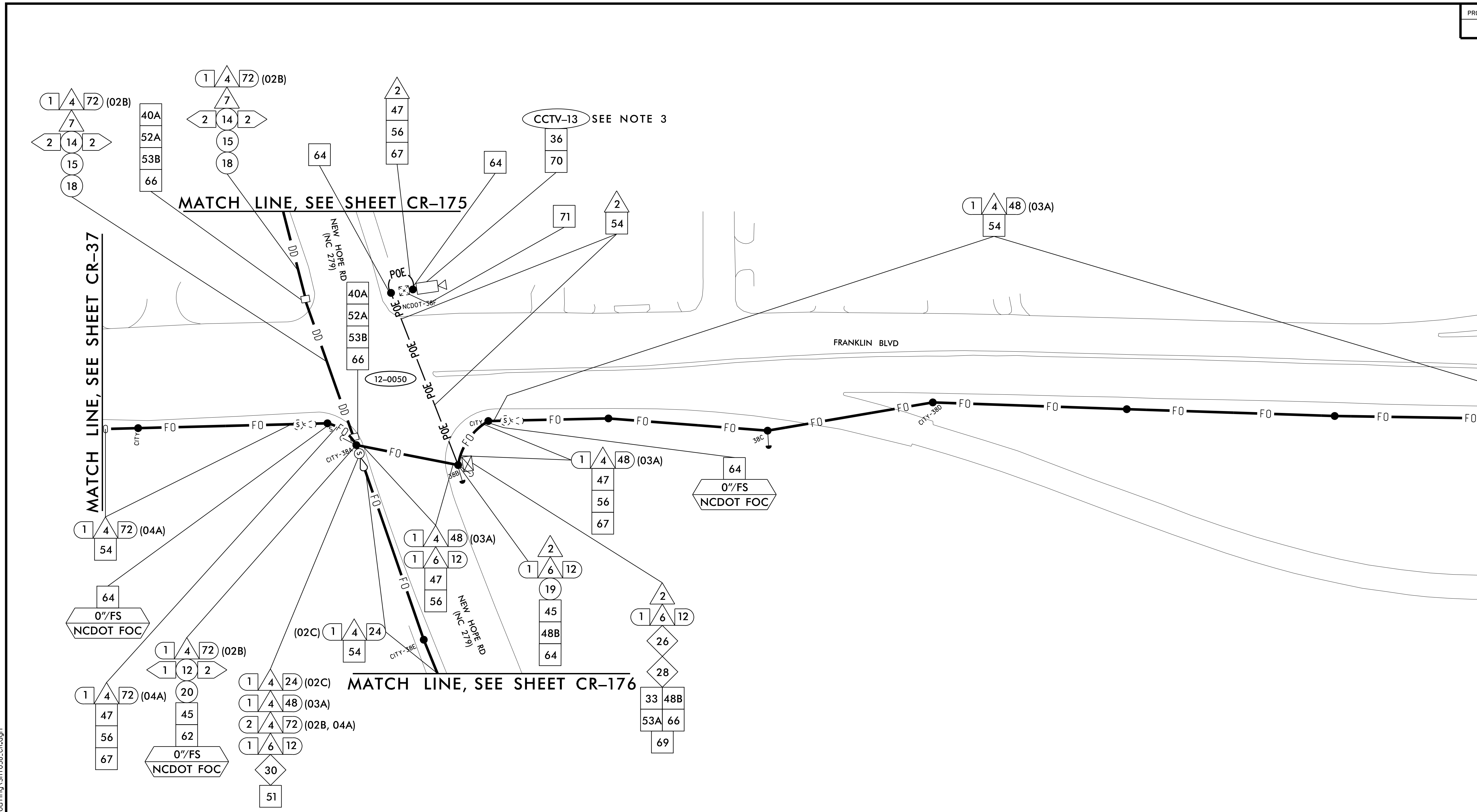
CADD File name: \_\_\_\_\_

**Kimley-Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050



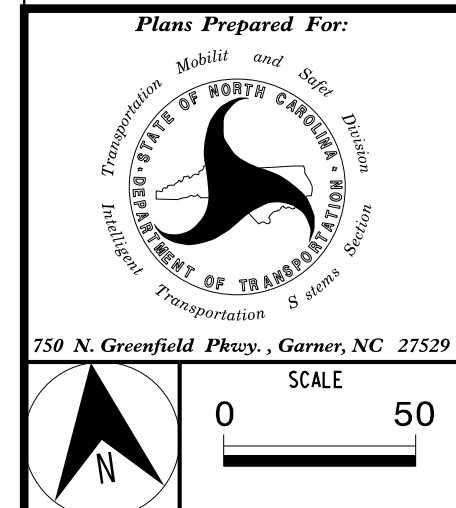




1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL NEW CCTV CAMERA IN PLACE OF EXISTING CCTV CAMERA.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

DATE: 3/18/2022

CADD File name:

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

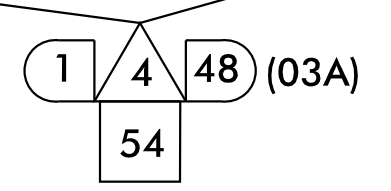
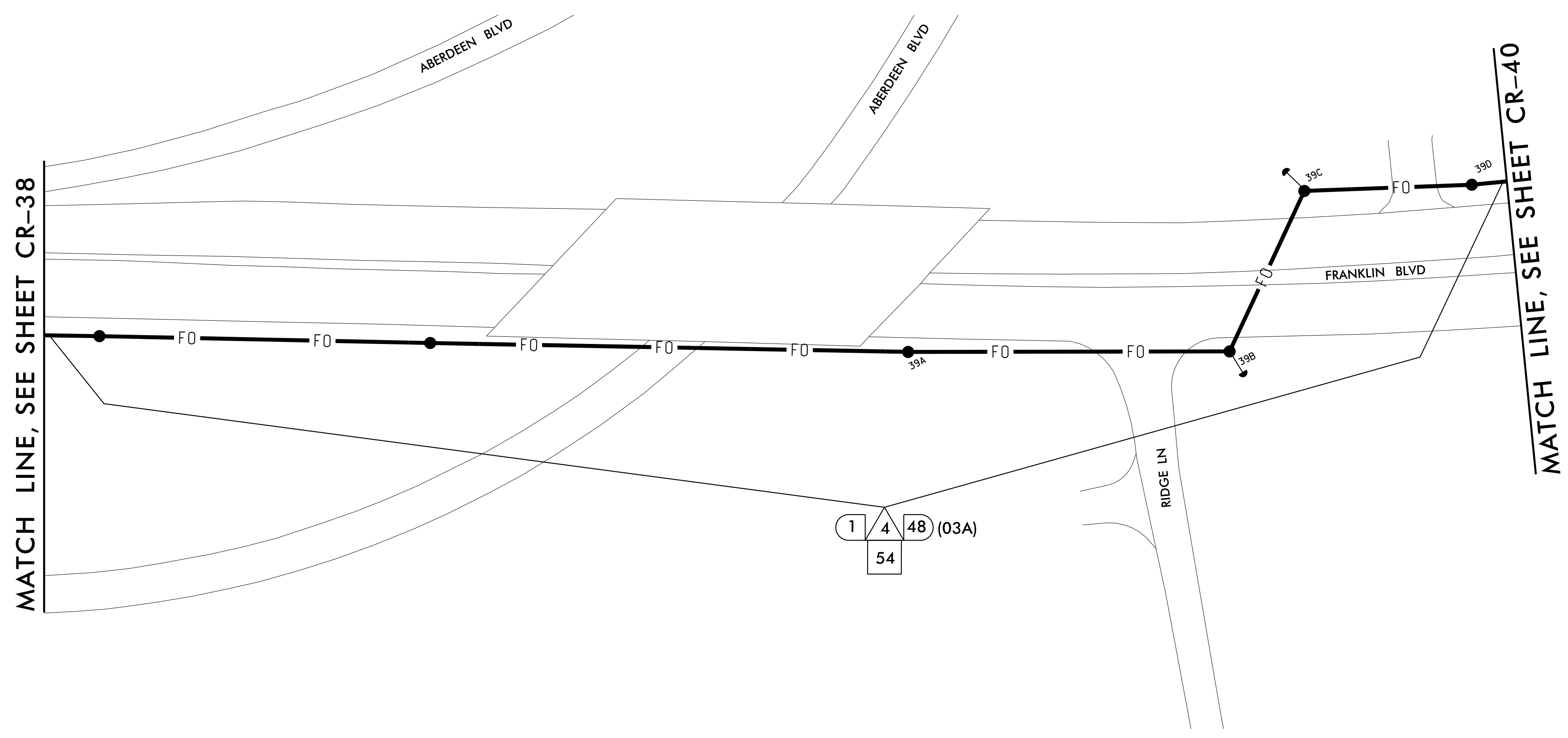
**Kimley»Horn**

Professional Engineer  
I. VAN OSDELL

DATE: 3/18/2022

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT038\_CR.dgn

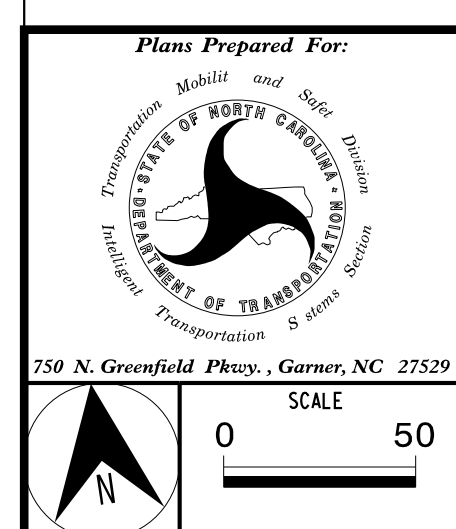




3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT039\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

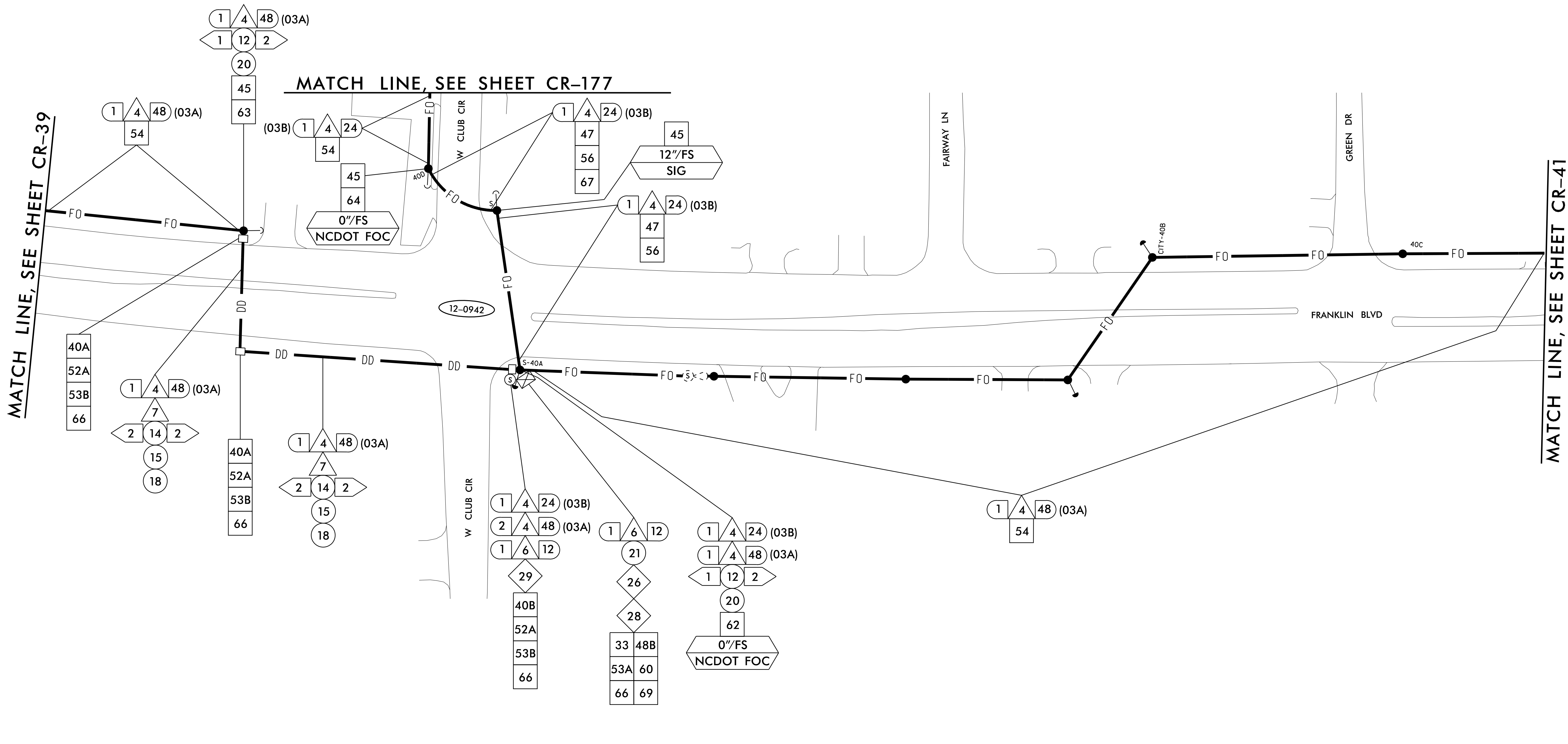
**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL

**North Carolina Professional Engineer**  
 SEAL 028952  
 IGER VAN OSDEL

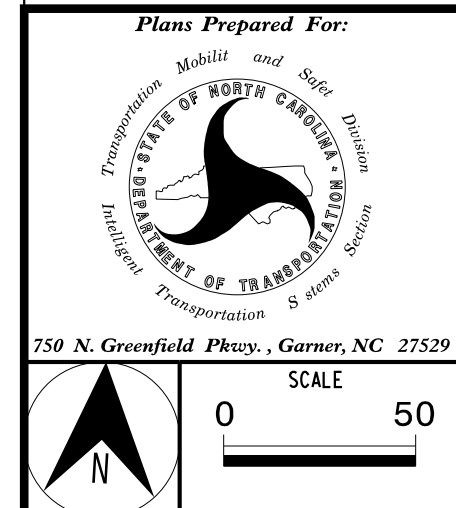
DocuSigned by:  
 Iger Van Osdel  
 3/18/2022

CADD File name:



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

Scale: 0 to 50 feet

**Kimley»Horn**

NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL

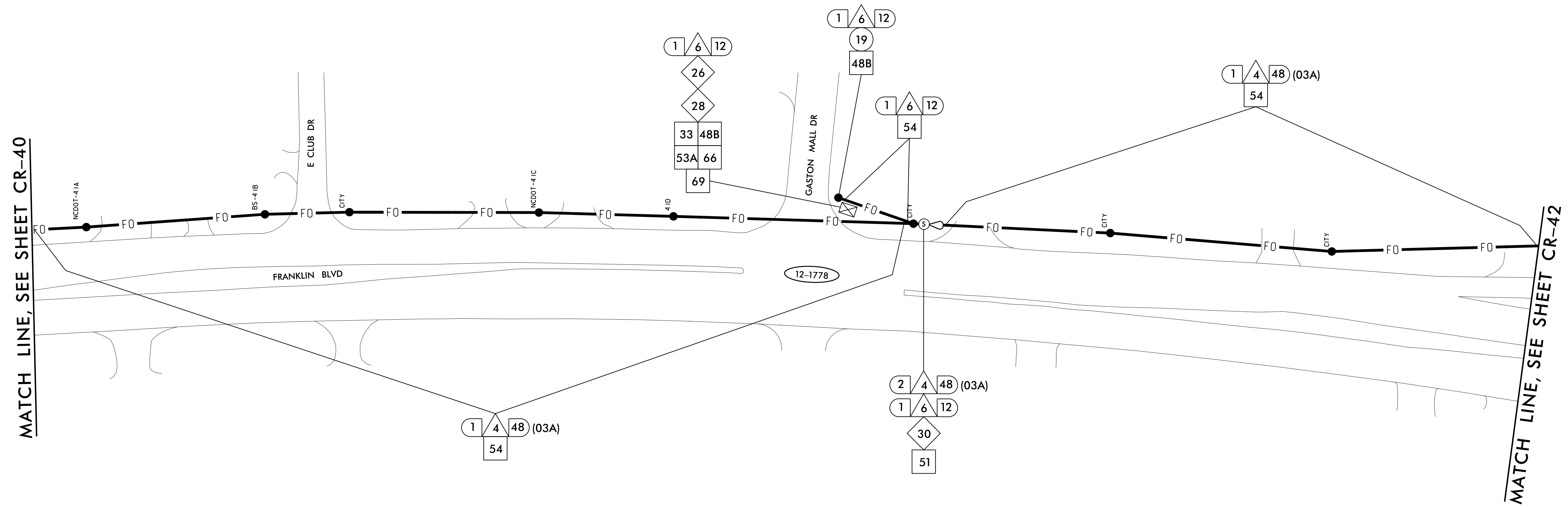
**North Carolina Professional Engineer Seal**  
 License # 028952  
 I. Van Osdel

DocuSigned by:  
 I. Van Osdel  
 3/18/2022

CADD File name:

3/17/2022  
 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH040\_CR.dgn





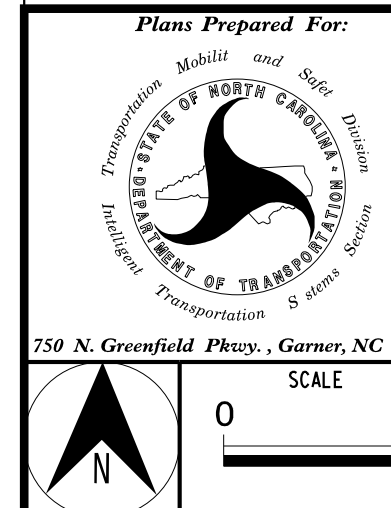
MATCH LINE, SEE SHEET CR-40

MATCH LINE, SEE SHEET CR-42

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

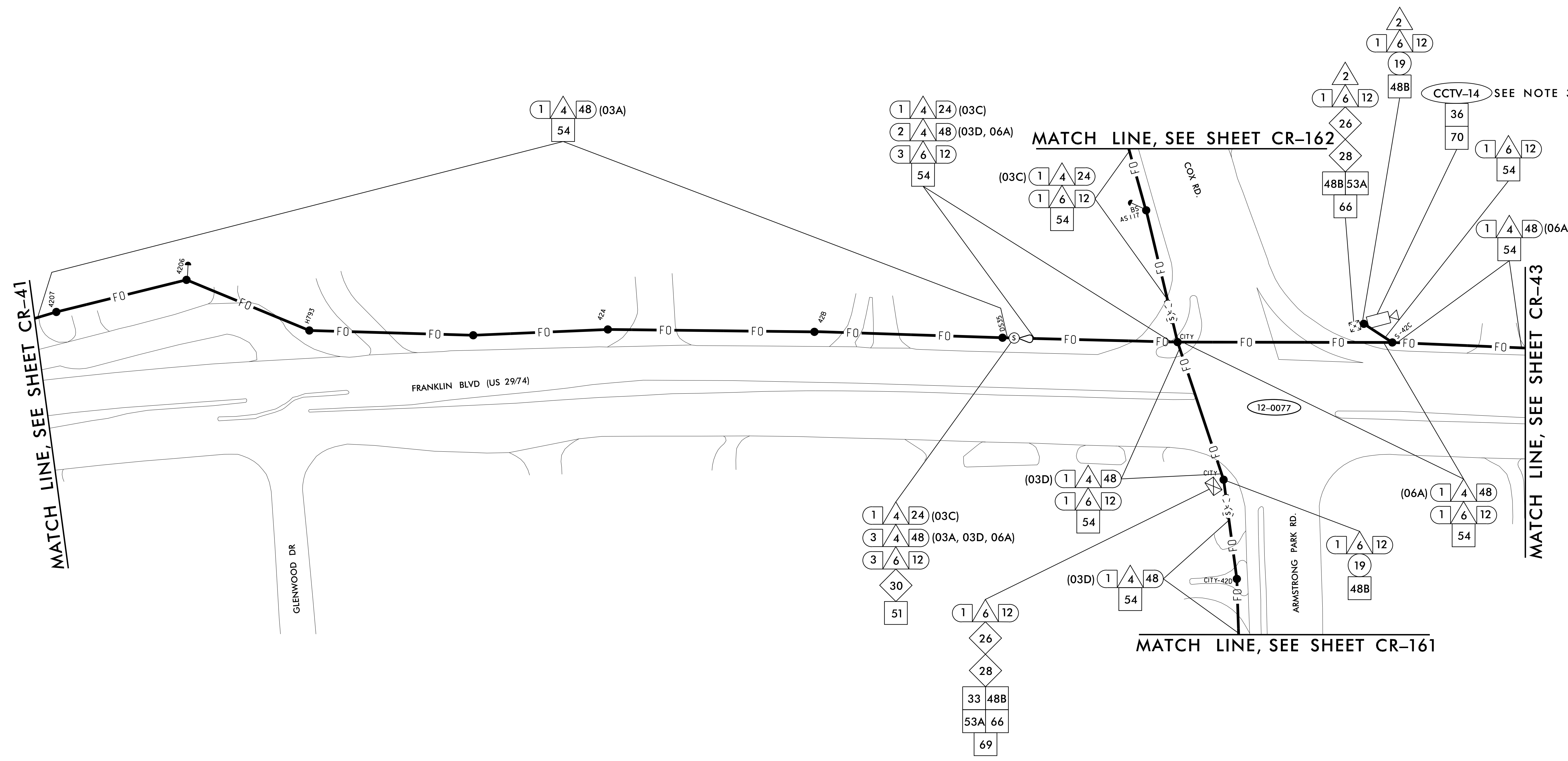
REVISIONS	INIT.	DATE

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 I. VAN OSDELL  
 3/18/2022  
 DATE

3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SHT041\_CR.dgn





1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
3. INSTALL NEW CCTV CAMERA IN PLACE OF EXISTING CCTV CAMERA.

Plans Prepared For:

250 N. Greenfield Place - Garner, NC 27529

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SEAL

3/18/2022

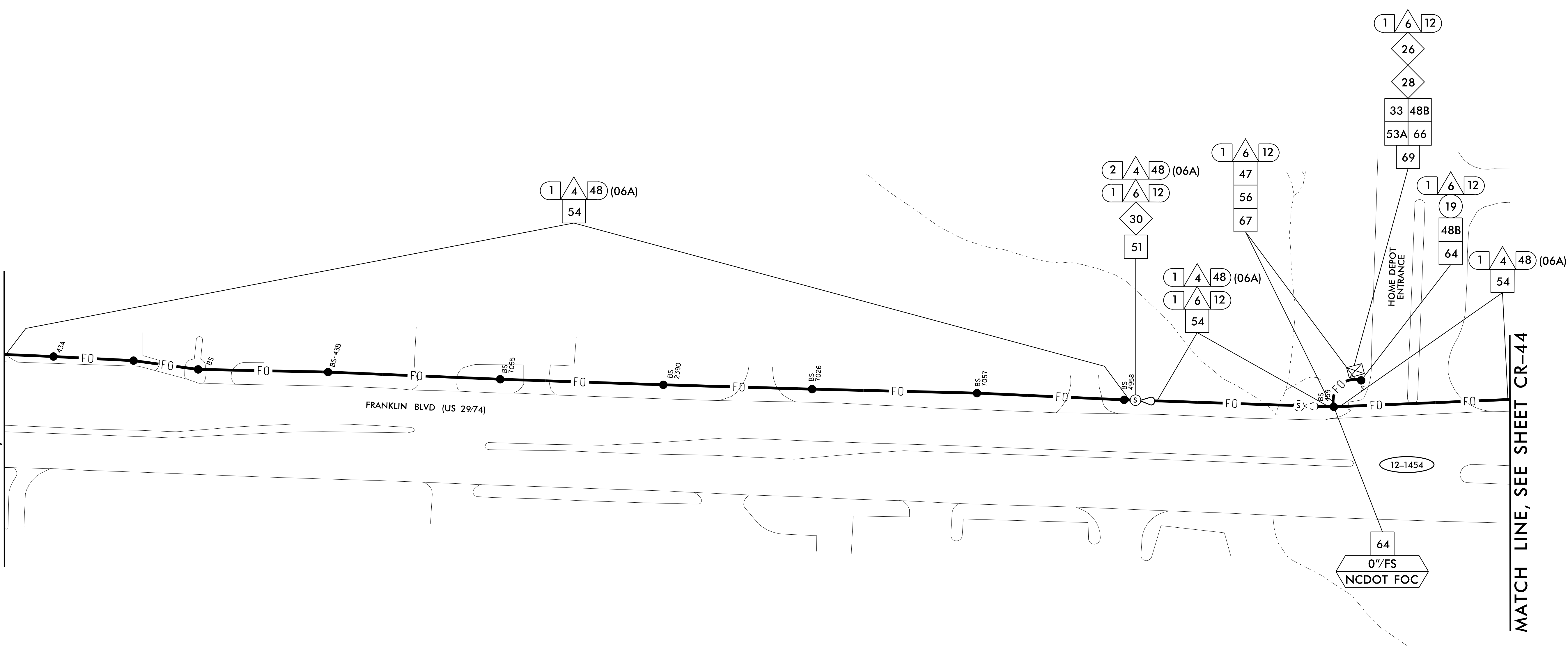
CADD File name:

3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH042\_CR.dgn



MATCH LINE, SEE SHEET CR-42

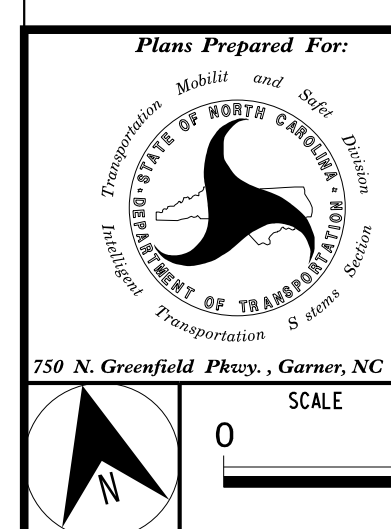
MATCH LINE, SEE SHEET CR-44



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBALE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

3/18/2022

DATE

**Kimley-Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**Kimley-Horn**

Professional Engineer  
Seal 028952

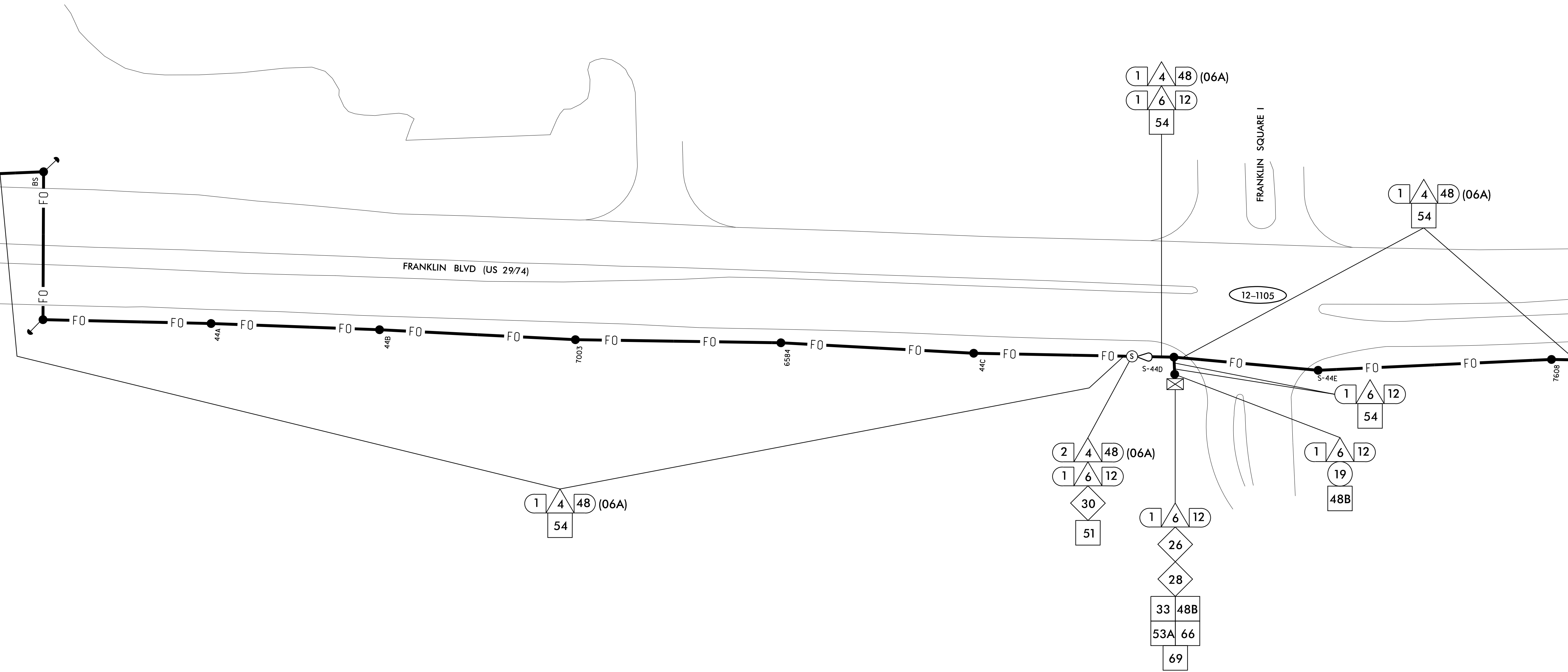
3/18/2022

DATE

3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH043\_CR.dgn

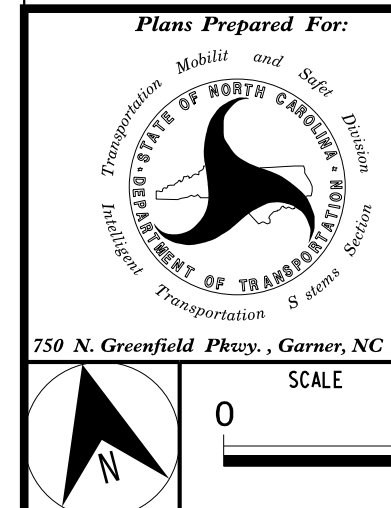
MATCH LINE, SEE SHEET CR-43

MATCH LINE, SEE SHEET CR-45



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

NOTES:  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:  
 CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

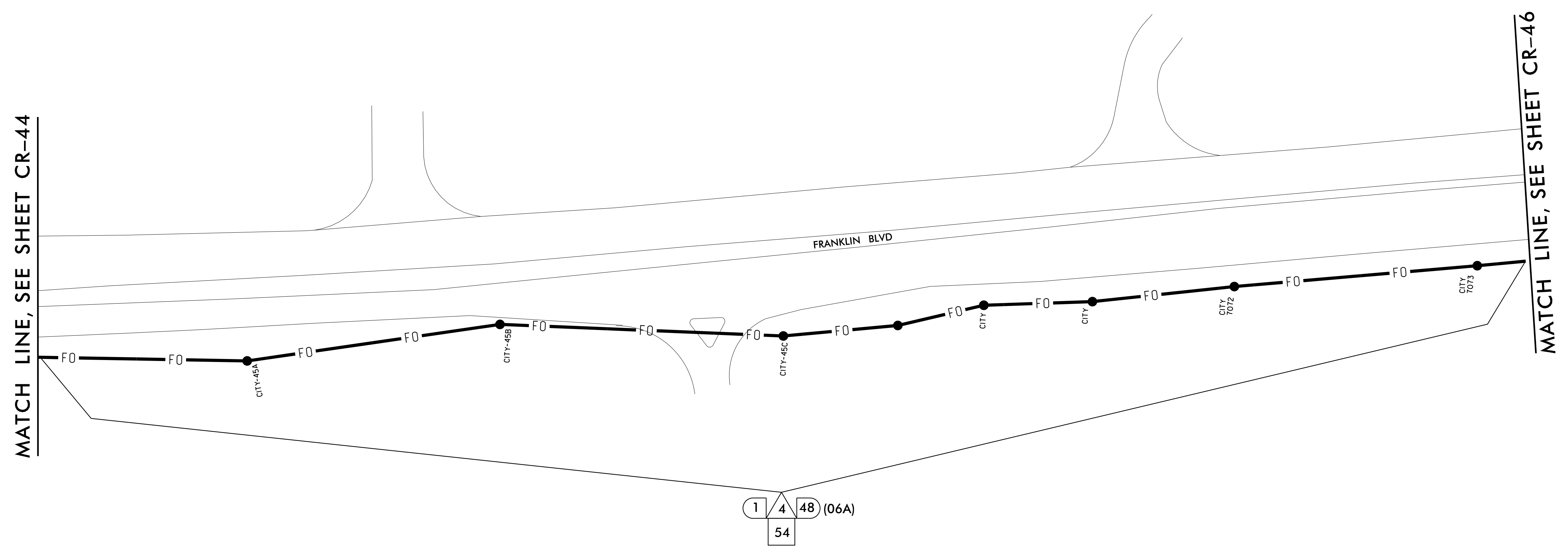
Scale: 0 50

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 I. VAN OSDELL  
 028952  
 3/18/2022  
 DATE

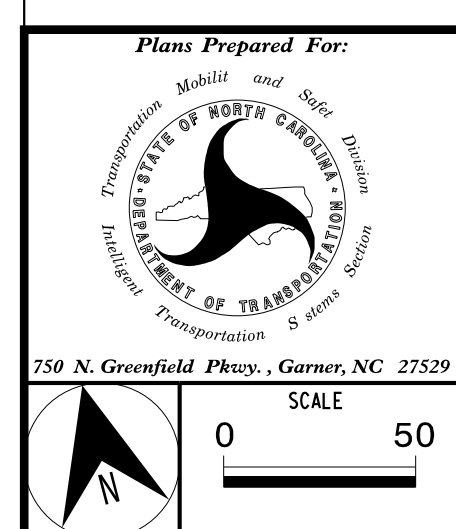
3/17/2022  
 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH044\_CR.dgn





1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

NOTES:  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.

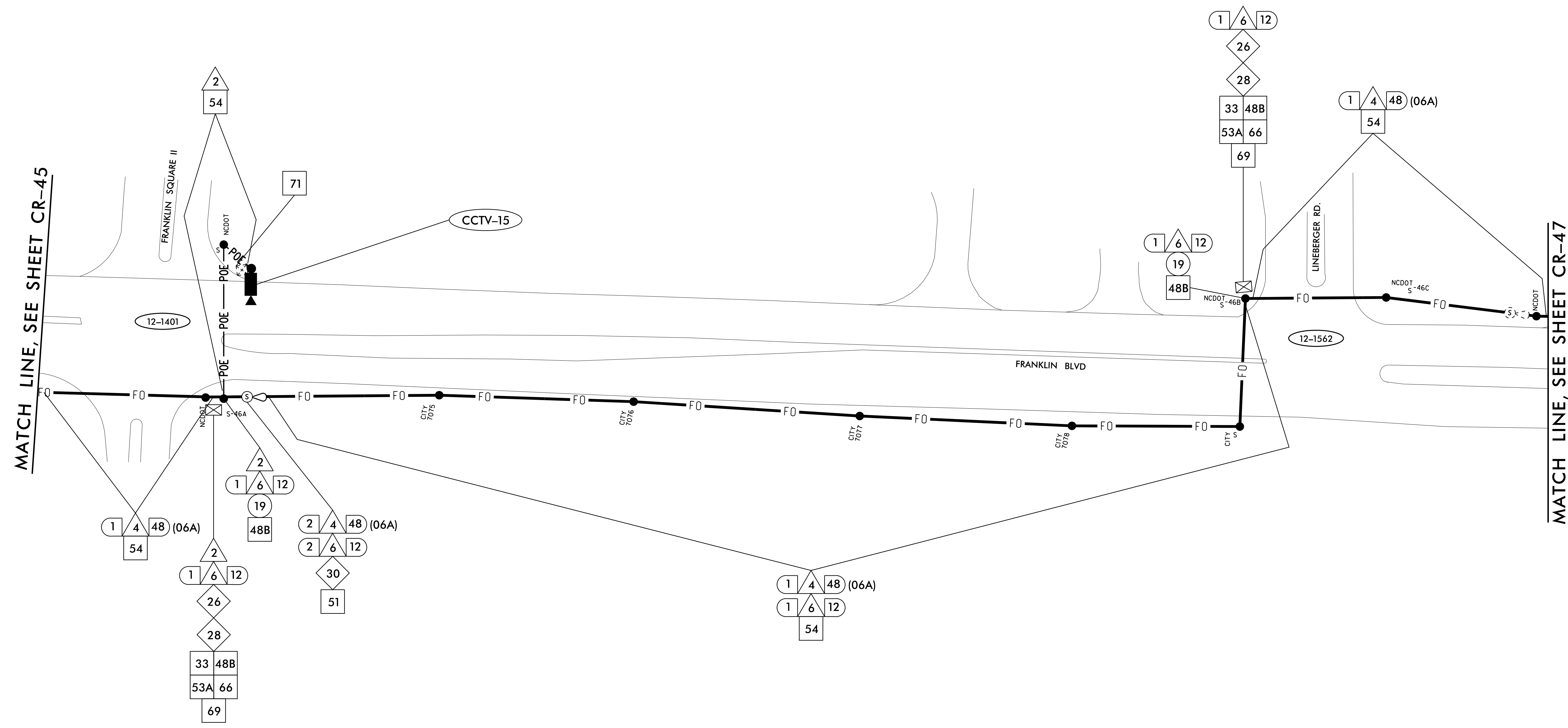


CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN	
DIVISION 12	GASTON COUNTY
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT. DATE

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

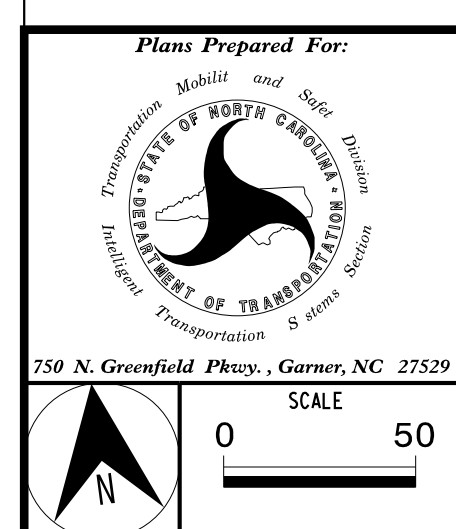
SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 028952  
 I. VAN OSDELL  
 DATE 3/18/2022  
 CADD Filename:

3/17/2022  
 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT045\_CR.dgn



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:  
**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

DATE: 3/18/2022

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

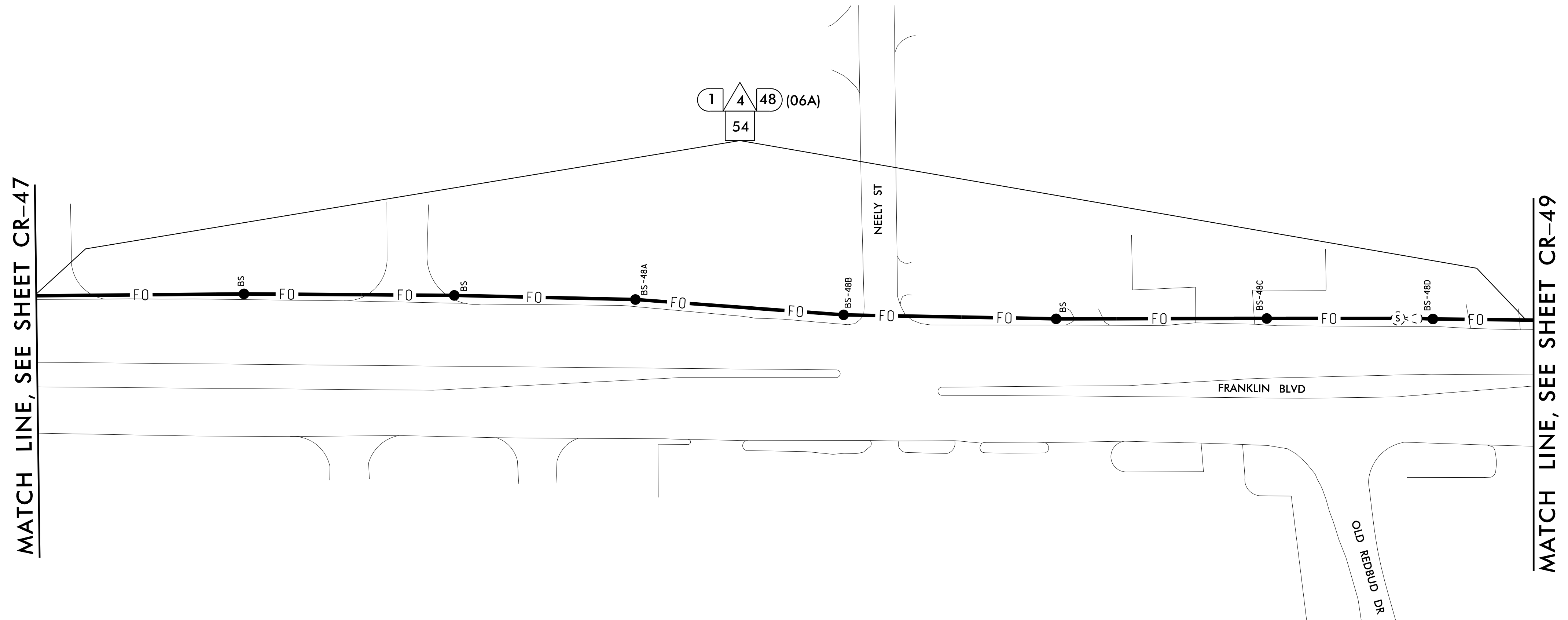
SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 IGER VAN OSDEL  
 License # 28952

DocuSigned by:  
 Iger Van Osdel  
 3/18/2022

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SHTO46\_CR.dgn







MATCH LINE, SEE SHEET CR-47

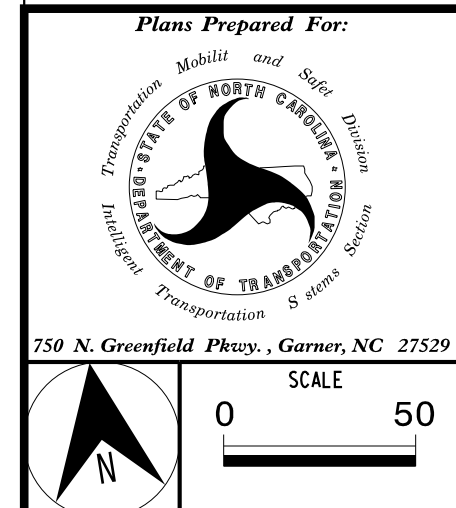
MATCH LINE, SEE SHEET CR-49

3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SHO48\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

Scale: 0 to 50

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**North Carolina Professional Engineer**

SEAL 028952

IGER Z. VAN OSDEL

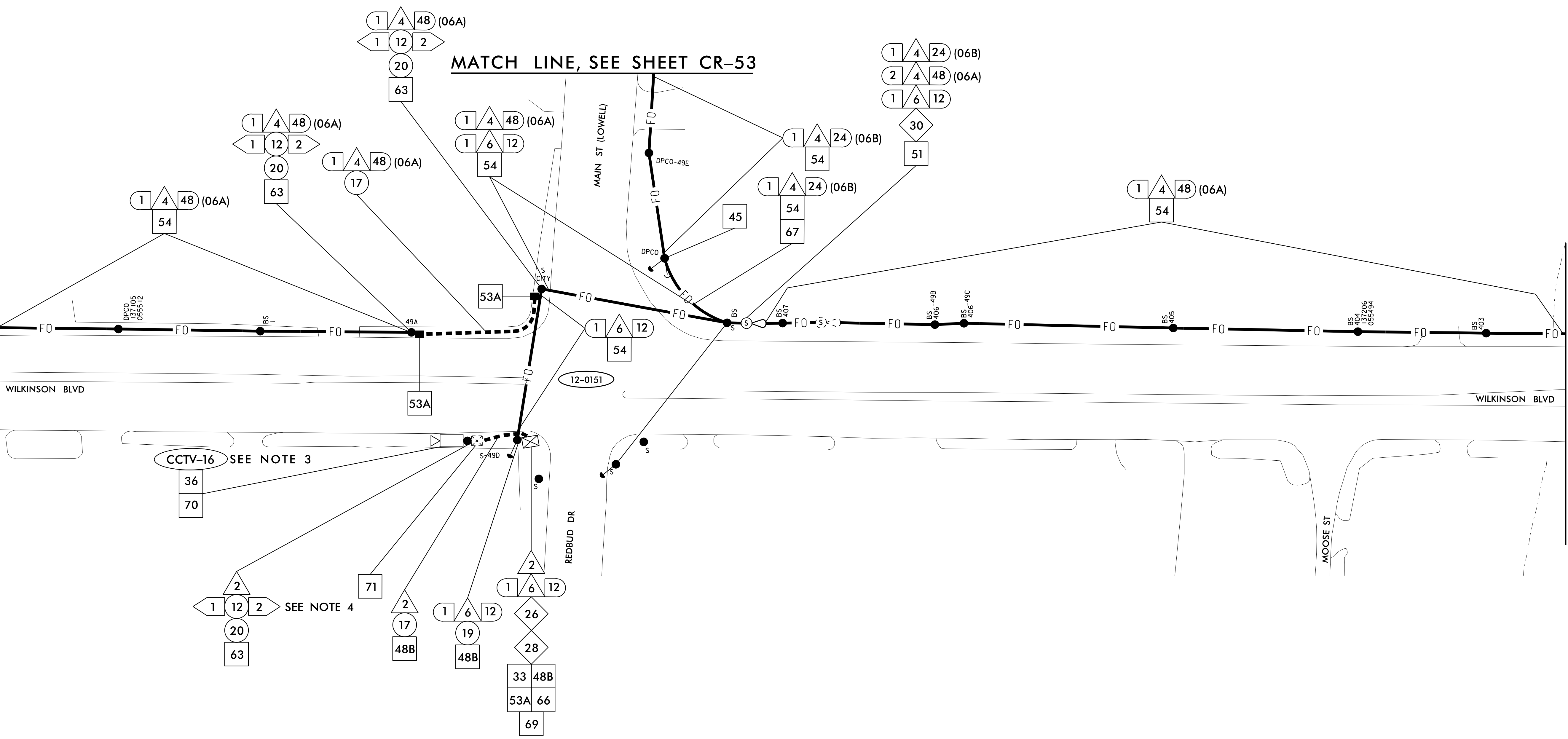
DocuSigned by: Iger Van Osdel 3/18/2022

CADD File name:



MATCH LINE, SEE SHEET CR-48

MATCH LINE, SEE SHEET CR-50



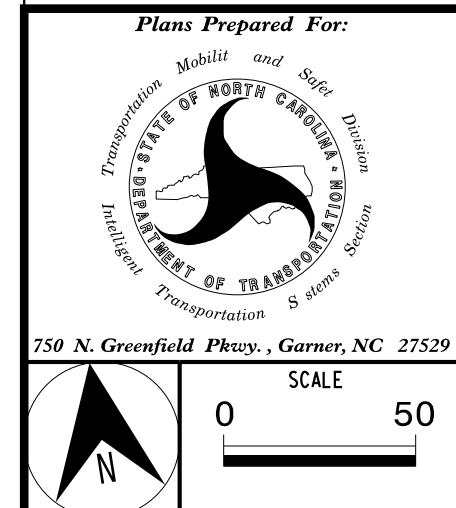
MATCH LINE, SEE SHEET CR-53

3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT049\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**

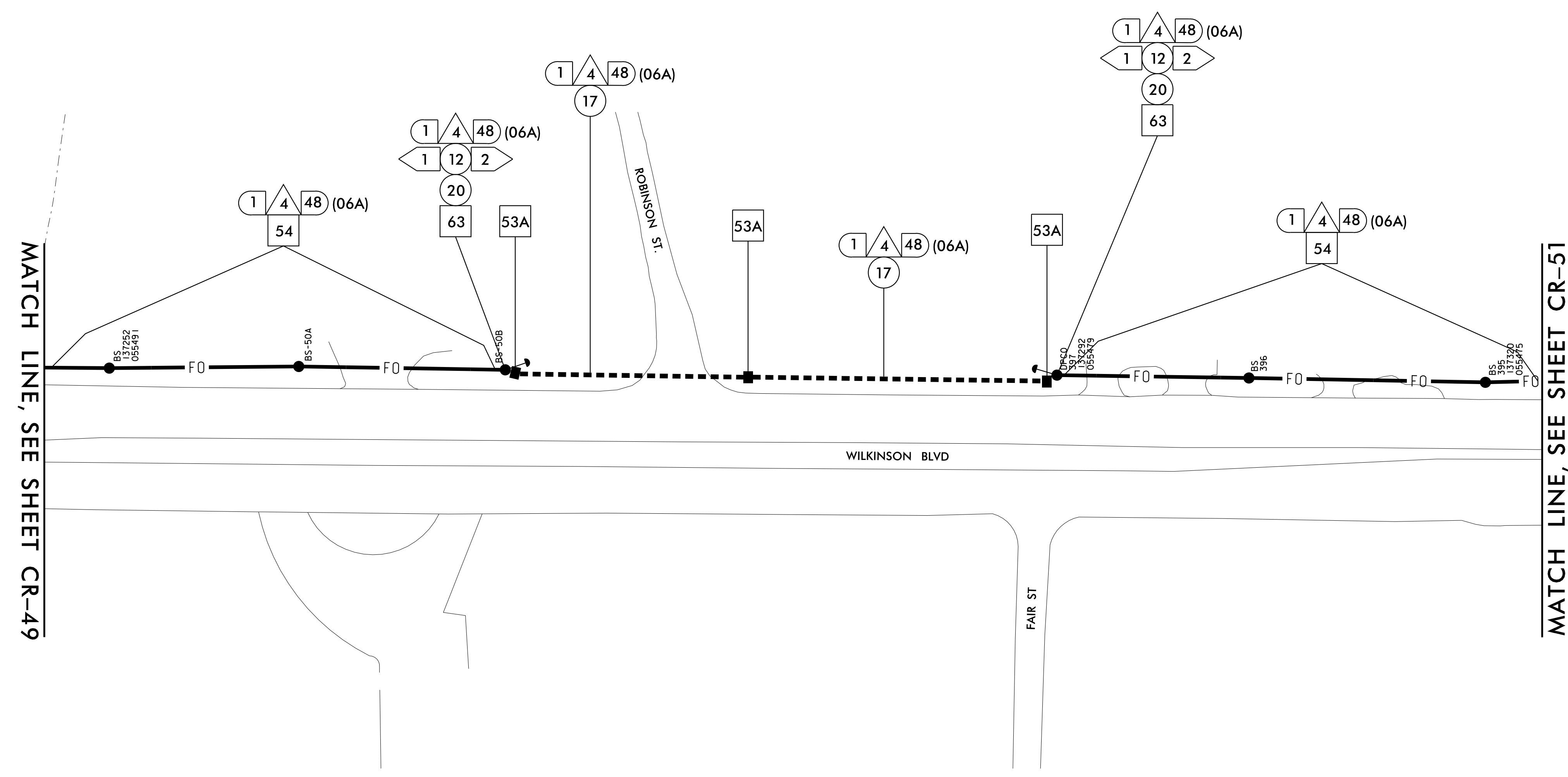
- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL NEW CCTV CAMERA IN PLACE OF EXISTING CCTV CAMERA.
- CONNECT NEW RISER TO EXISTING SPARE CONDUIT STUB-OUT.



<b>CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN</b>	
DIVISION 12	GASTON COUNTY
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT. DATE

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 I. VAN OSDELL  
 3/18/2022  
 DATE



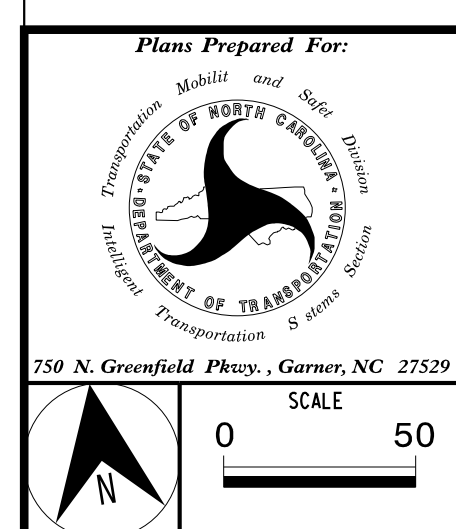
MATCH LINE, SEE SHEET CR-49

MATCH LINE, SEE SHEET CR-51

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

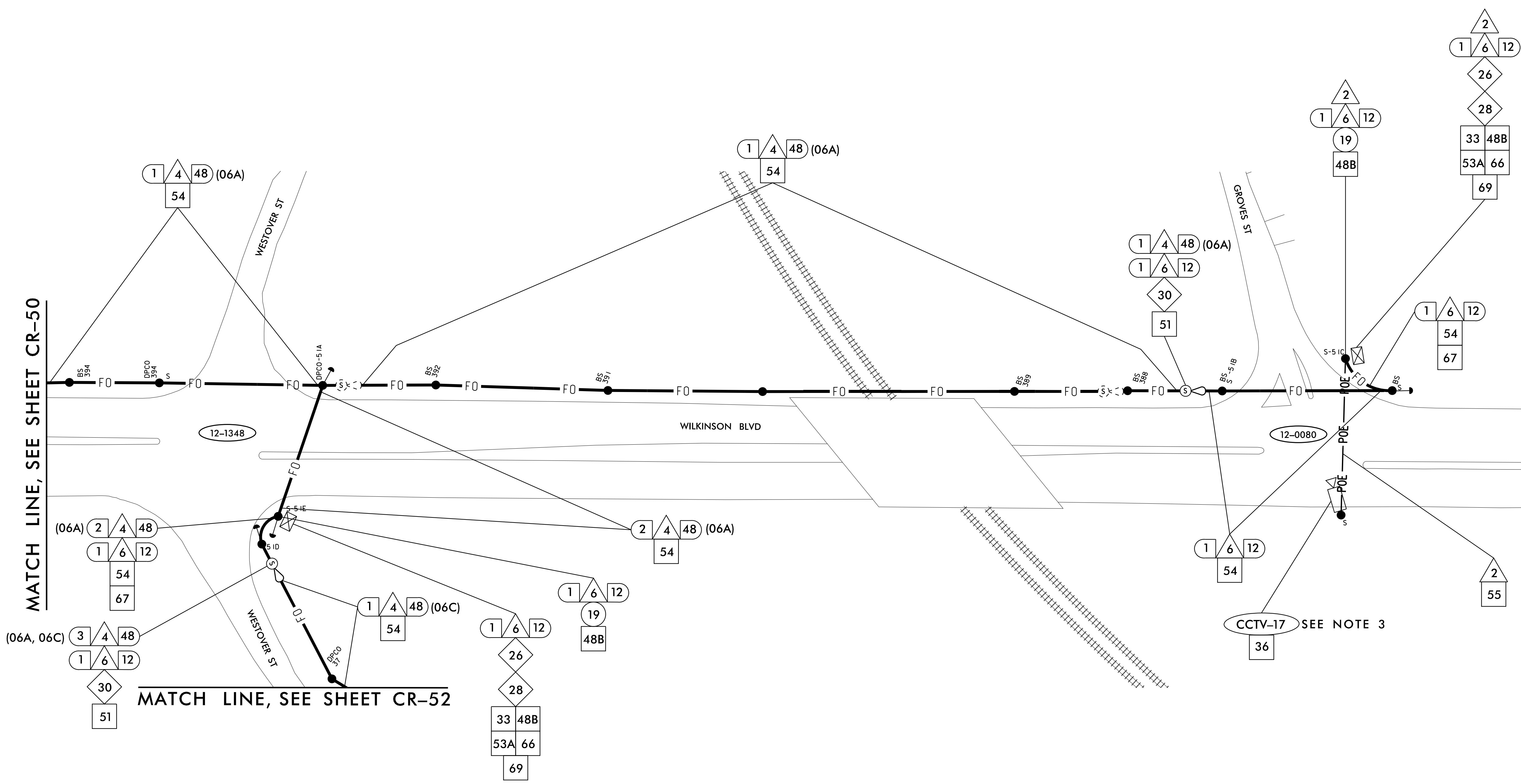
**ROGER Z. VAN OSDEL**  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 028952

DocuSigned by:  
**Roger Van Osdel** 3/18/2022

CADD File name: \_\_\_\_\_

3/17/2022 K:\ARL\TPTD\ITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH050\_CR.dgn





MATCH LINE, SEE SHEET CR-50

MATCH LINE, SEE SHEET CR-52

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL CCTV CAMERA 12" BELOW TOP OF POLE. SEE ITS-13.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

DATE: 3/18/2022

CADD File name:

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**ROGER Z. VAN OSDELL**

Professional Engineer  
State of North Carolina  
License # 28952

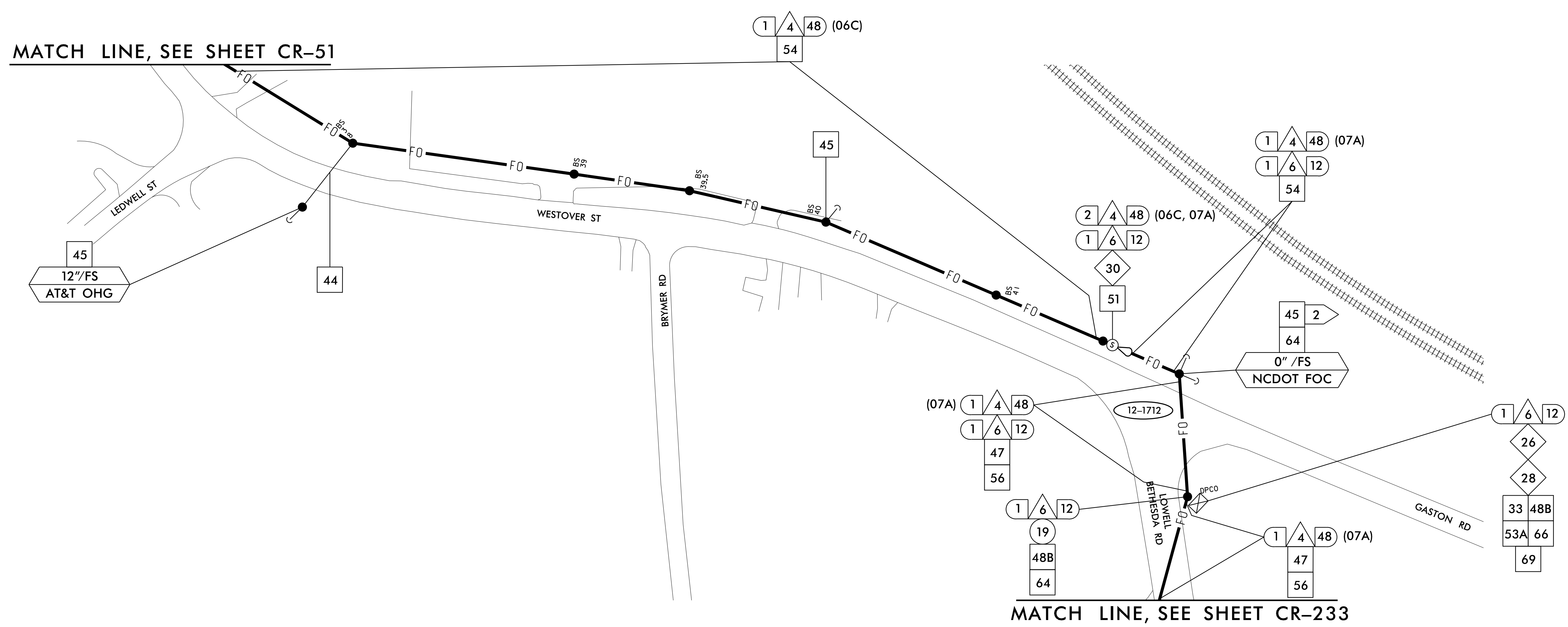
DATE: 3/18/2022

3/17/2022 K:\ARL\TPTD\ITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH05\_CR.dgn



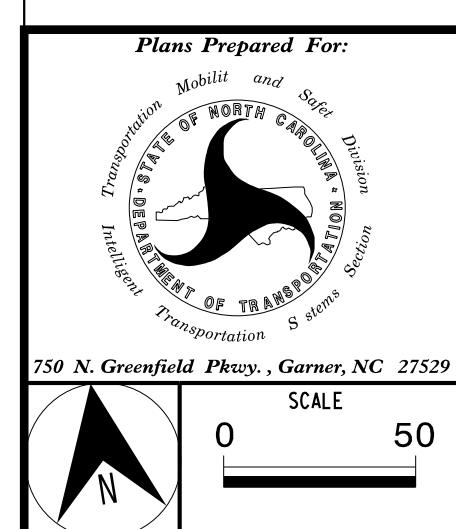
MATCH LINE, SEE SHEET CR-51

MATCH LINE, SEE SHEET CR-233



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

NOTES:  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



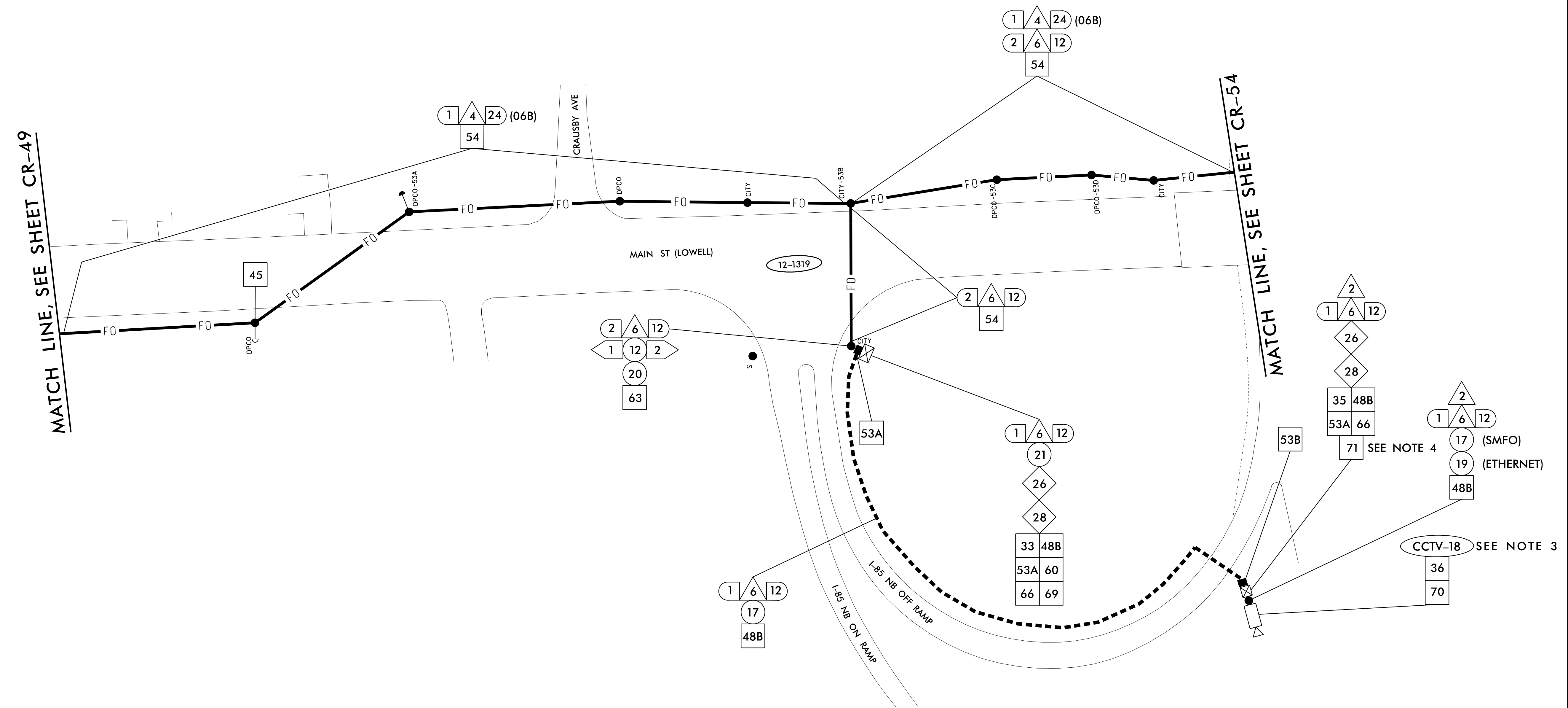
CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN	
DIVISION 12	GASTON COUNTY
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT. DATE

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 028952  
 I. VAN OSDELL  
 DATE 3/18/2022  
 CADD File name:

3/17/2022 K:\ARL\TPTD\ITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT052\_CR.dgn



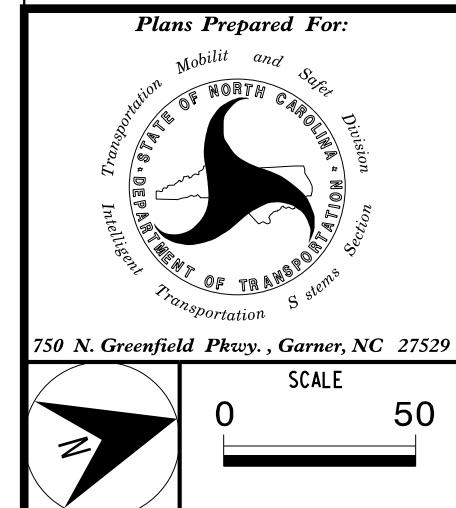


3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT053\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL NEW CCTV CAMERA AND CABINET IN PLACE OF EXISTING CCTV CAMERA AND CABINET.
- REPLACE EXISTING DAMAGED CCTV CABINET WITH A NEW CABINET. RETAIN EXISTING CONDUITS, ELECTRICAL SERVICE, AND ELECTRICAL CONDUCTORS.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

**Kimley»Horn**

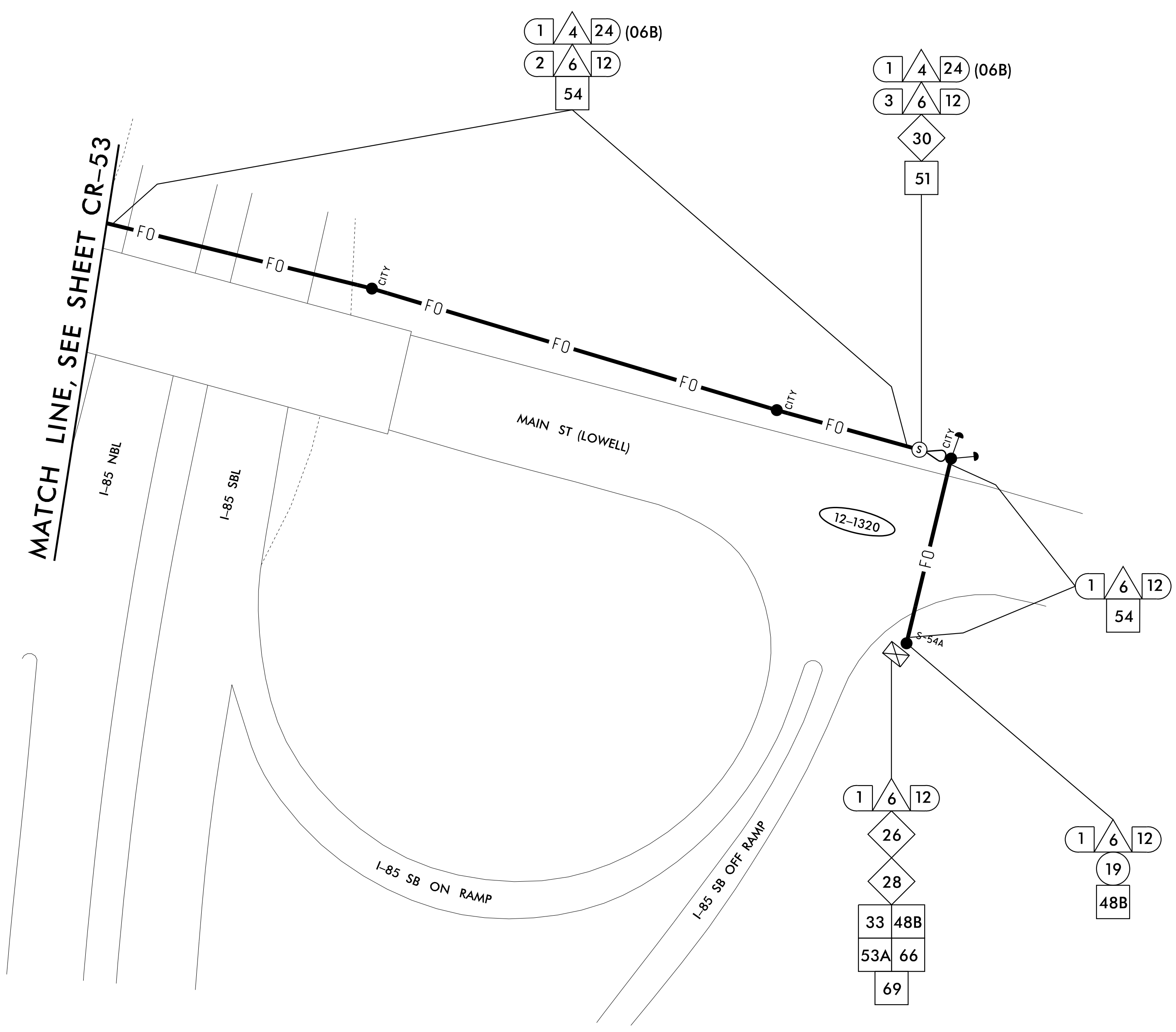
NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**North Carolina Professional Engineer**  
I. Van Osdel  
License No. 27601

DocuSigned by:  
I. Van Osdel  
3/18/2022

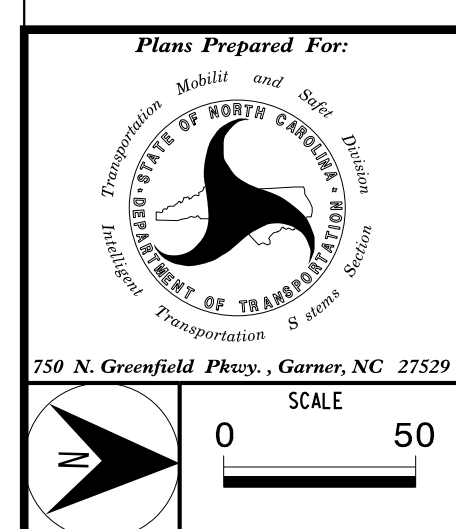
CADD File name:



3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT054\_CRF.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

NOTES:  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.

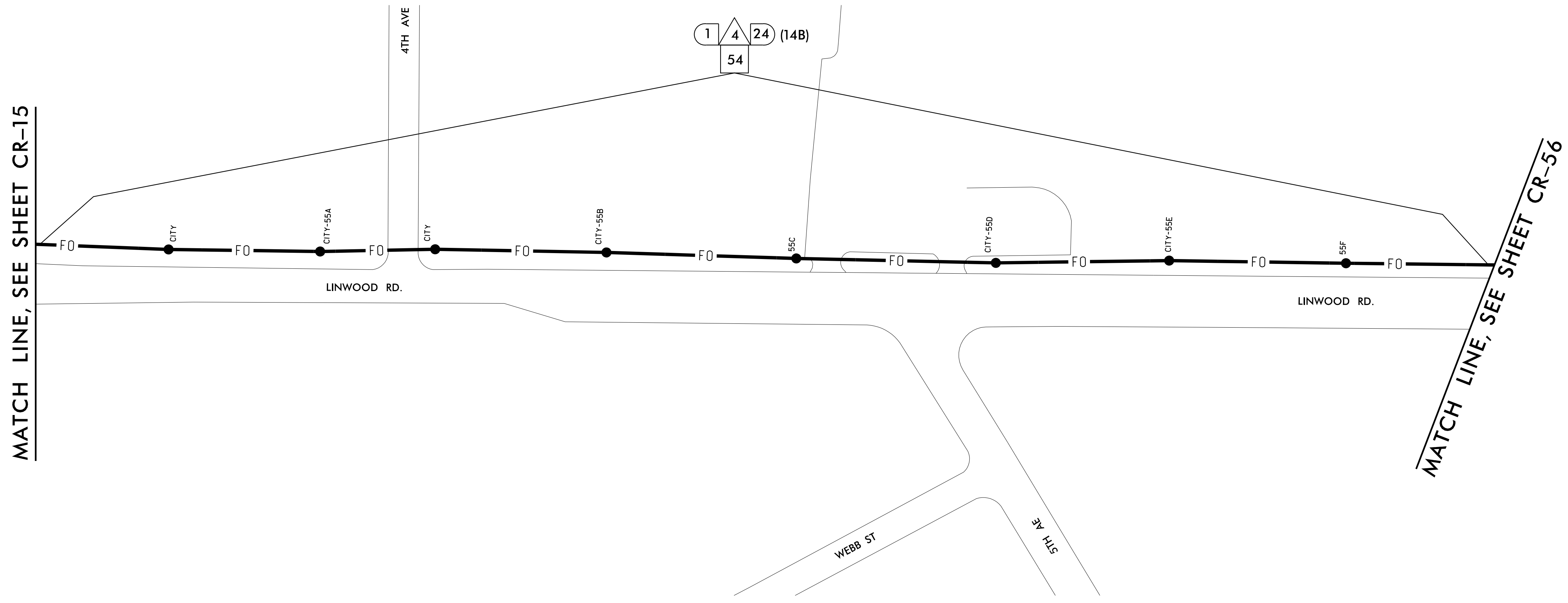


CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN	
DIVISION 12	GASTON COUNTY
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT. DATE

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 I. VAN OSDELL  
 3/18/2022  
 CADD File name:



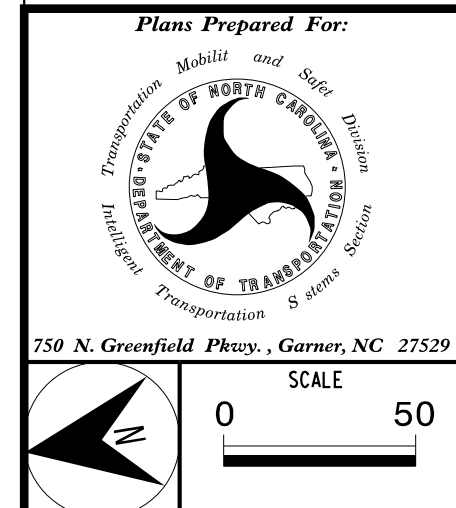


1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT055\_CR.dgn

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

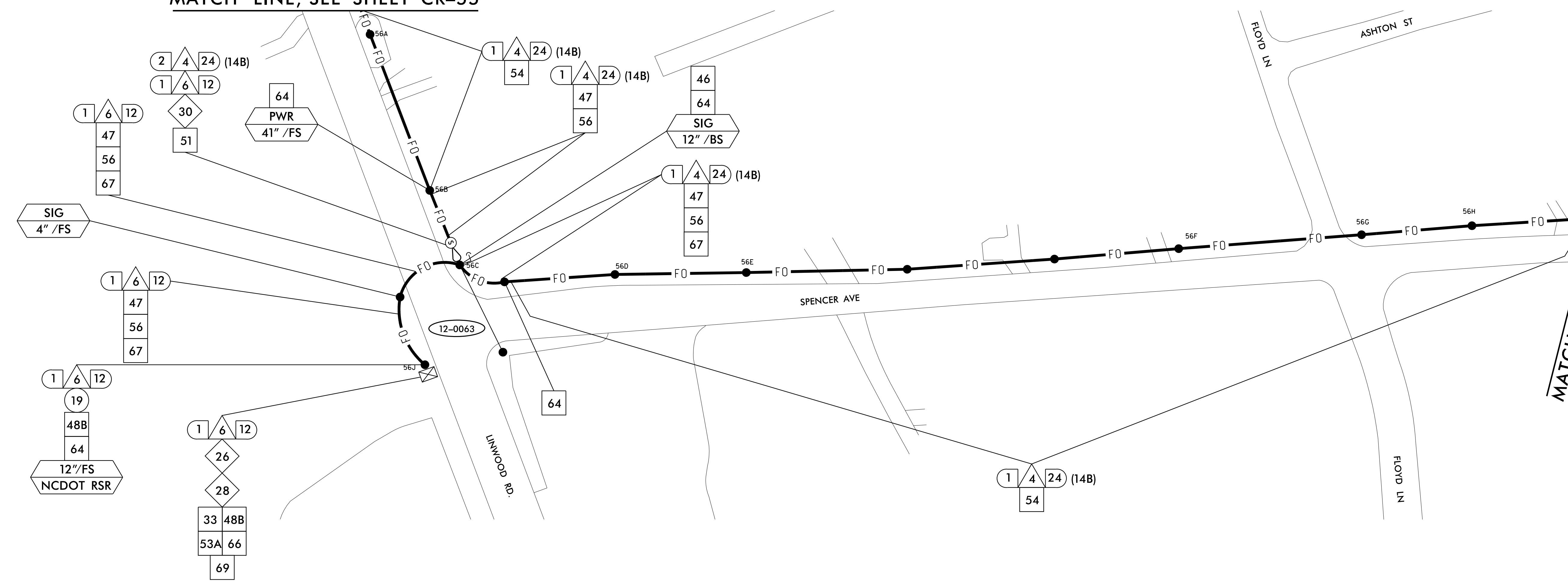


Plans Prepared For:		CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN	
DIVISION 12		GASTON COUNTY	
PLAN DATE:	DECEMBER 2021	REVIEWED BY:	K. SMITH
PREPARED BY:	S. BUTLER	REVIEWED BY:	I. VAN OSDELL
REVISIONS	INIT.	DATE	

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 I. VAN OSDELL  
 028952  
 3/18/2022  
 CADD File name:

MATCH LINE, SEE SHEET CR-55

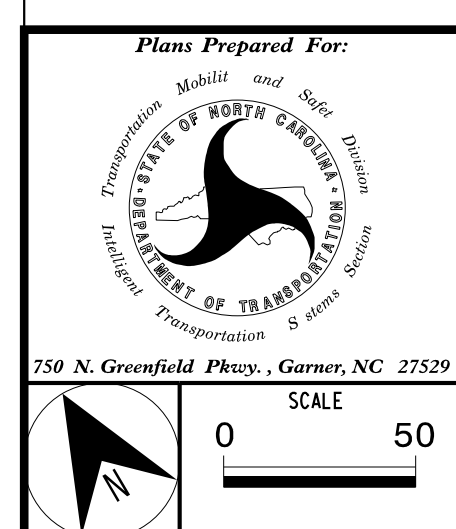
MATCH LINE, SEE SHEET CR-57



3/17/2022 K:\ARL\TPTD\ITS\01036569 Gastonia SignalSystem\6 Tasks\Plans\Cable Routing\SH056\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

NOTES:  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

DocuSigned by: Roger Van Osdel 3/18/2022

CADD File name:

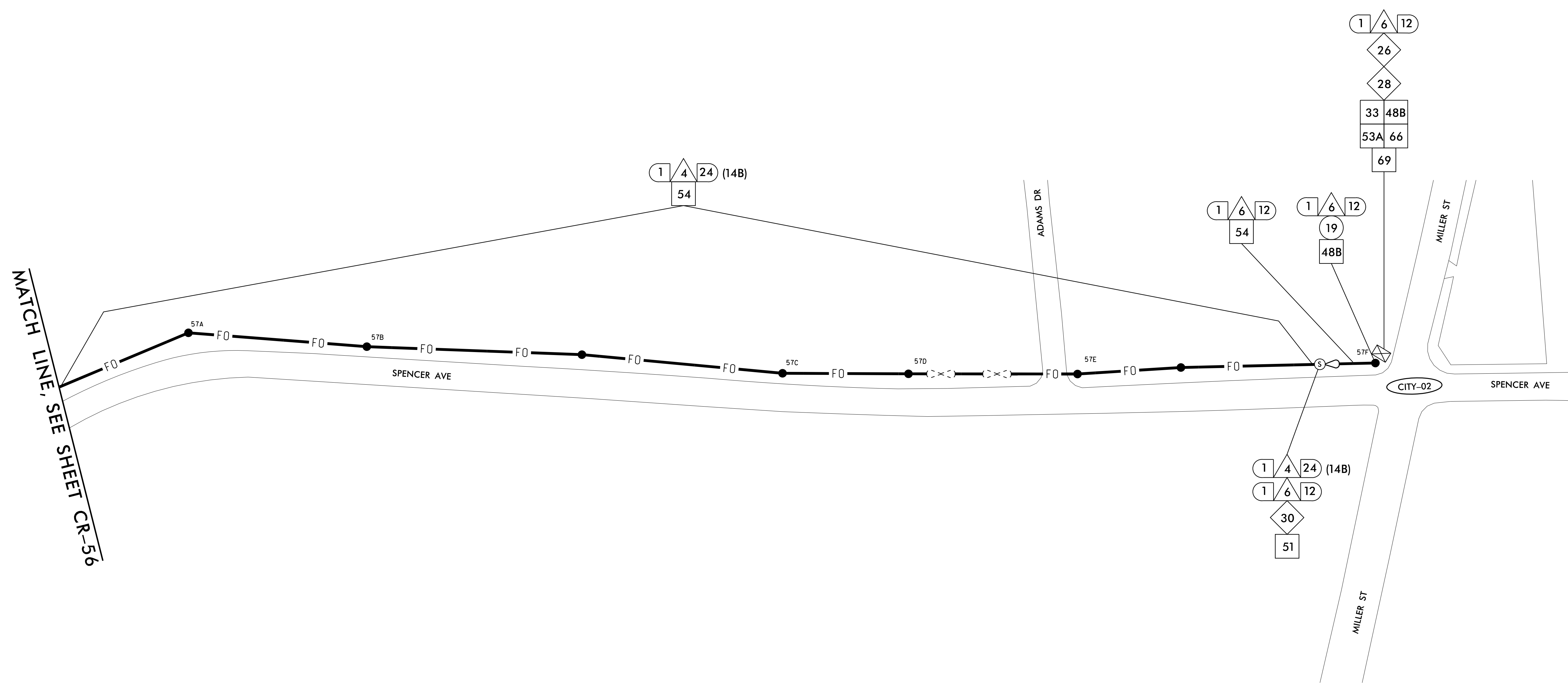
**Kimley»Horn**

NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL

**ROGER Z. VAN OSDEL**  
 PROFESSIONAL ENGINEER  
 STATE OF NORTH CAROLINA  
 LICENSE # 028952





3/17/2022 K:\ARL\_TPTD\_ITS\_01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT057\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**Plans Prepared For:**  
 CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN

**Division 12** GASTON COUNTY

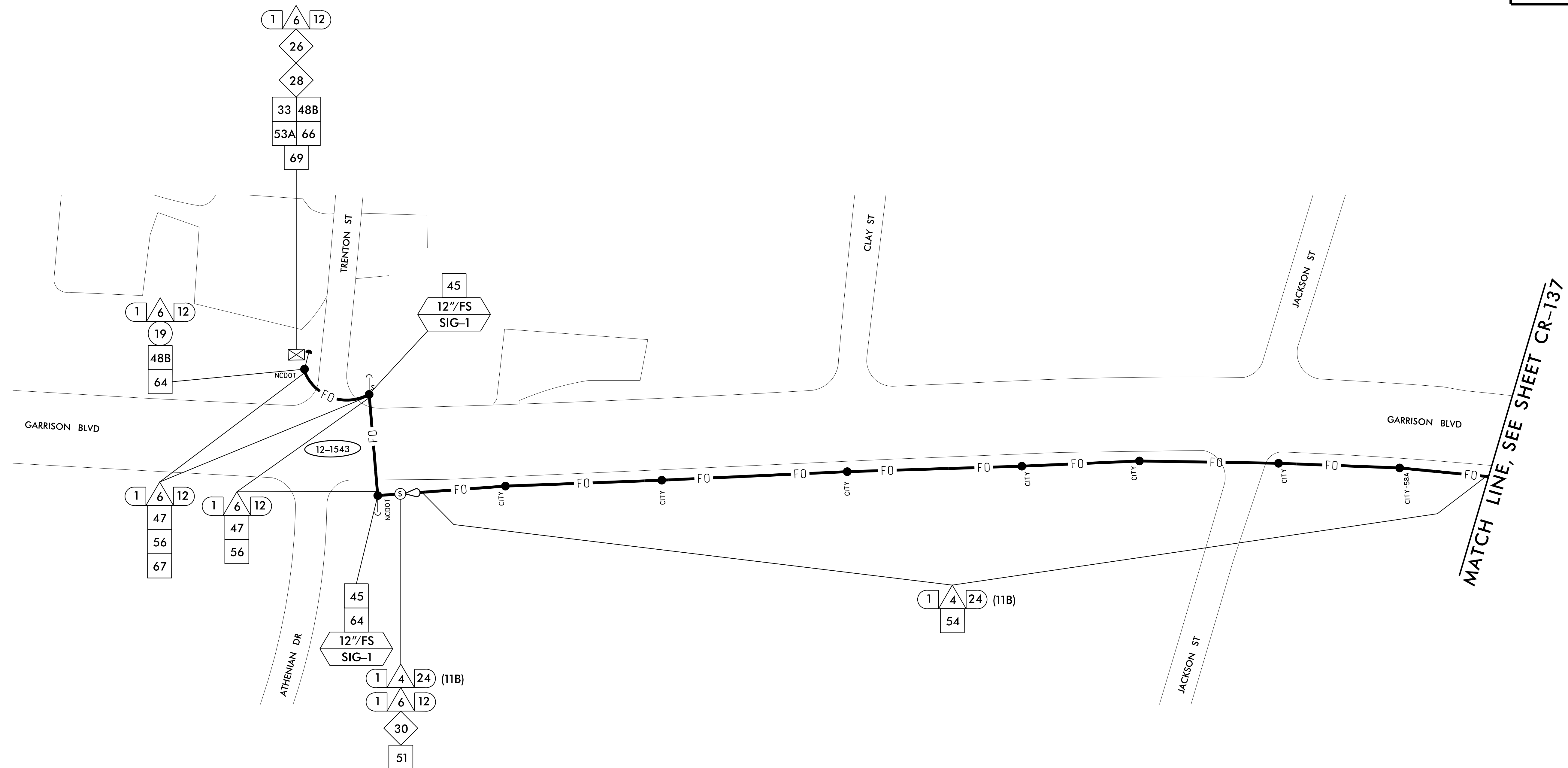
PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH  
 PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

SCALE: 0 50

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

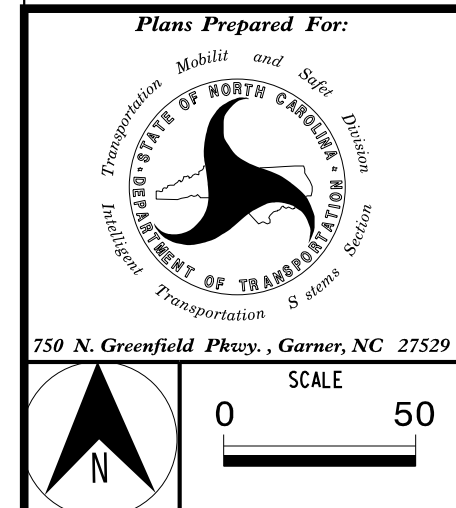
SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 Roger Van Osdel  
 3/18/2022  
 CADD File name:



3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT058\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

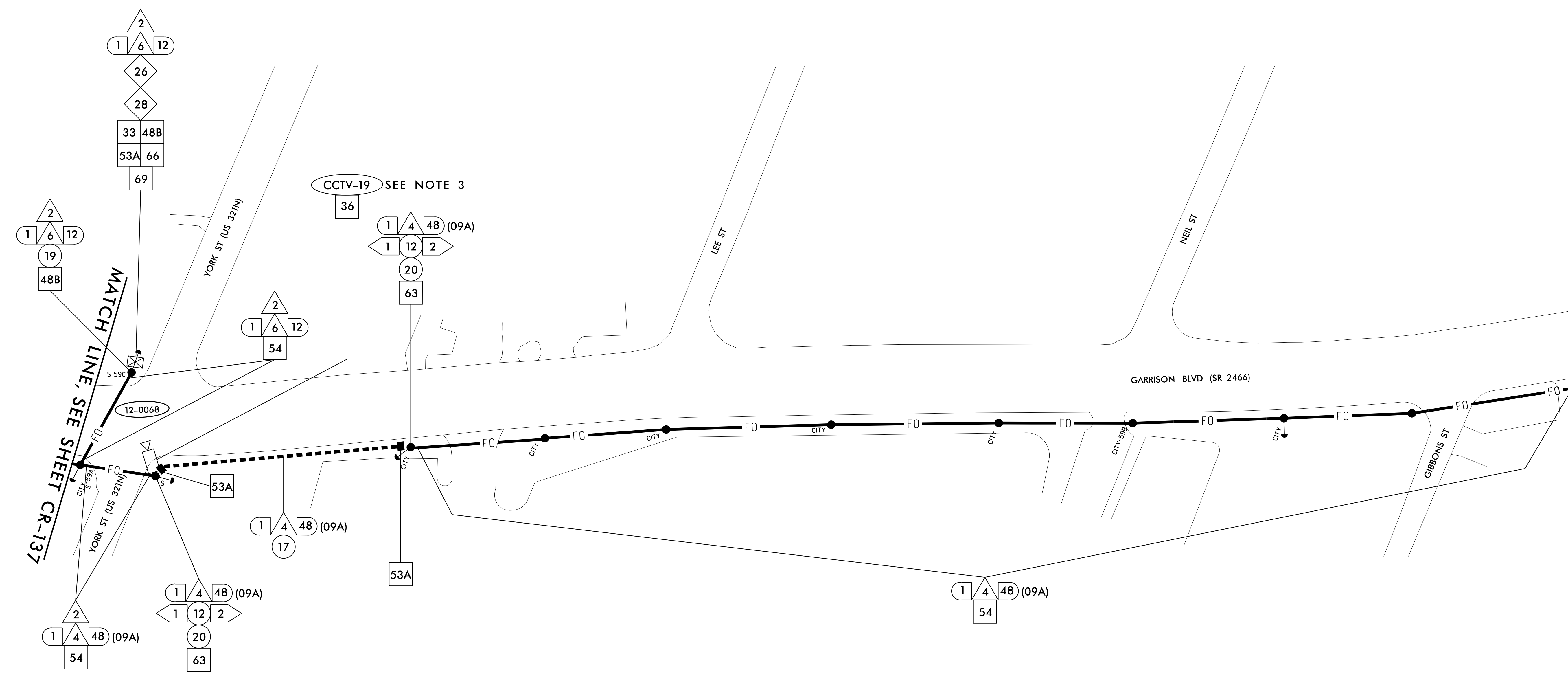
PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 I. VAN OSDELL  
 3/18/2022  
 CADD File name:

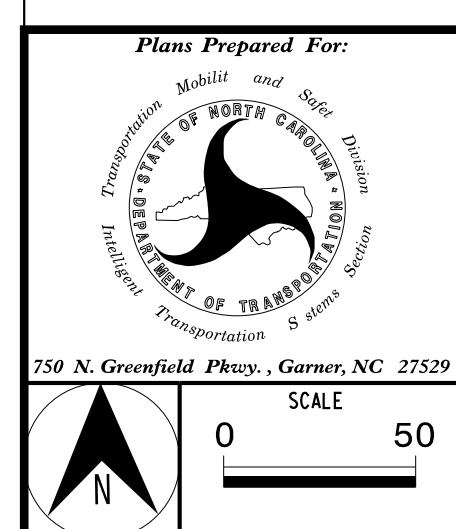




1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL CCTV CAMERA 12" BELOW TOP OF POLE. SEE ITS-13.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

Scale: 0 to 50 feet

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

SEAL

**North Carolina Professional Engineer**  
No. 028952  
I. Van Osdel

DocuSigned by:  
I. Van Osdel  
3/18/2022

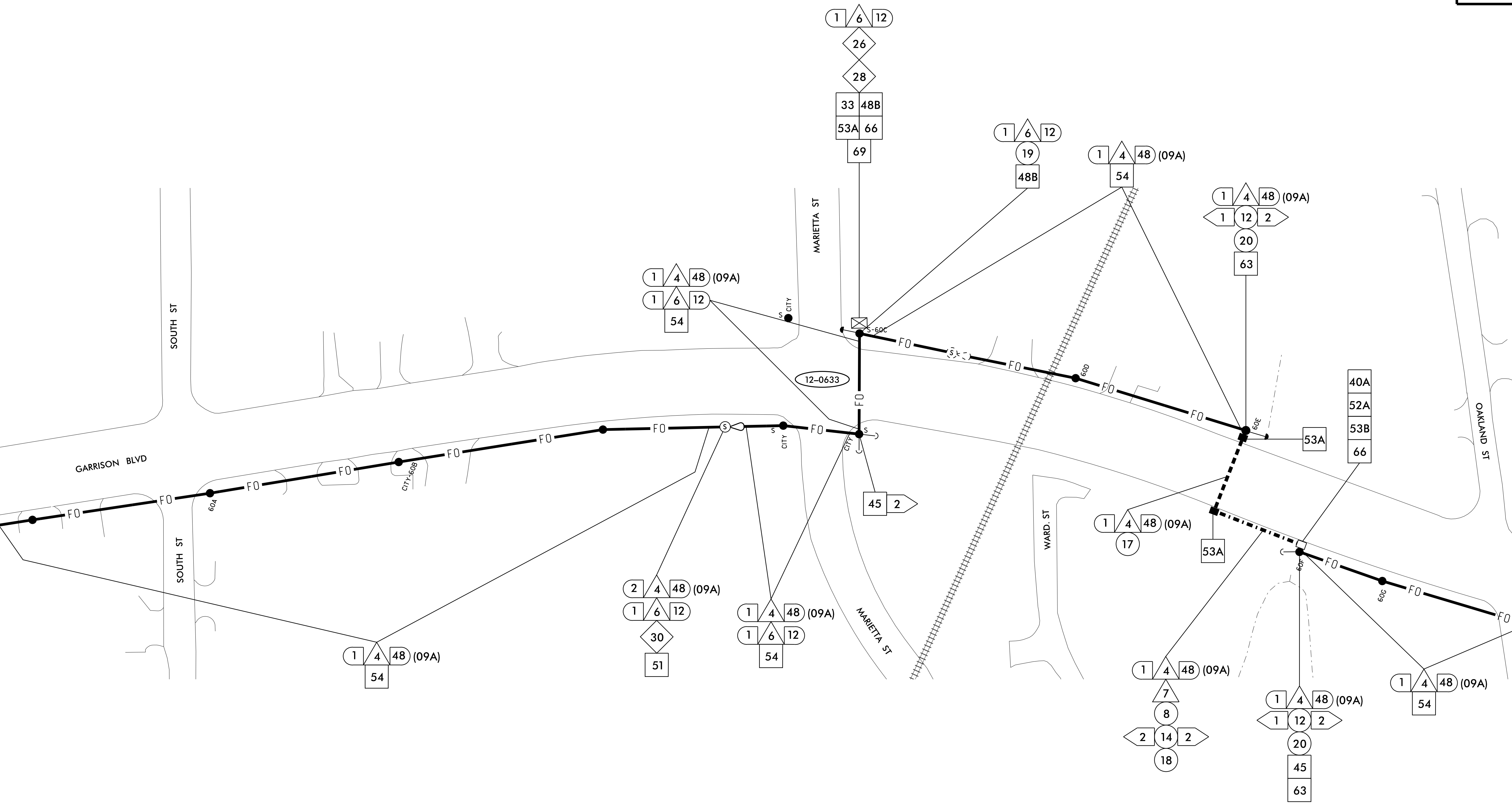
CADD File name:

3/17/2022 KARAL.TPTD.LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH059\_CR.dgn



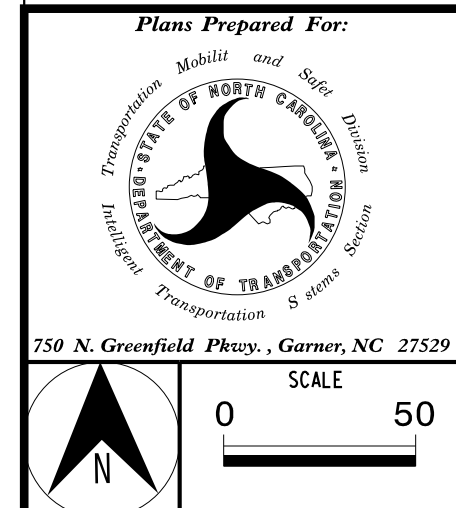
MATCH LINE, SEE SHEET CR-59

MATCH LINE, SEE SHEET CR-61



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12		GASTON COUNTY	
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH	PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT.	DATE	

**Kimley-Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

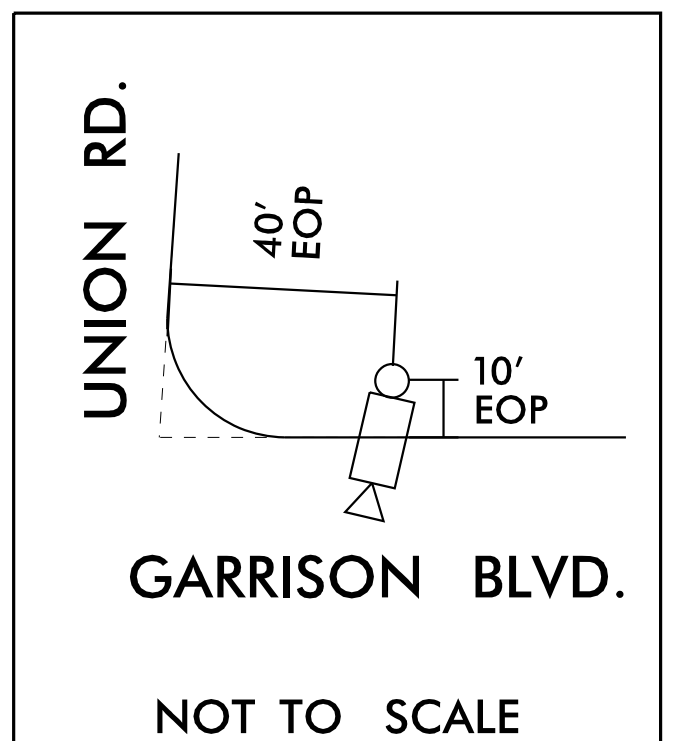
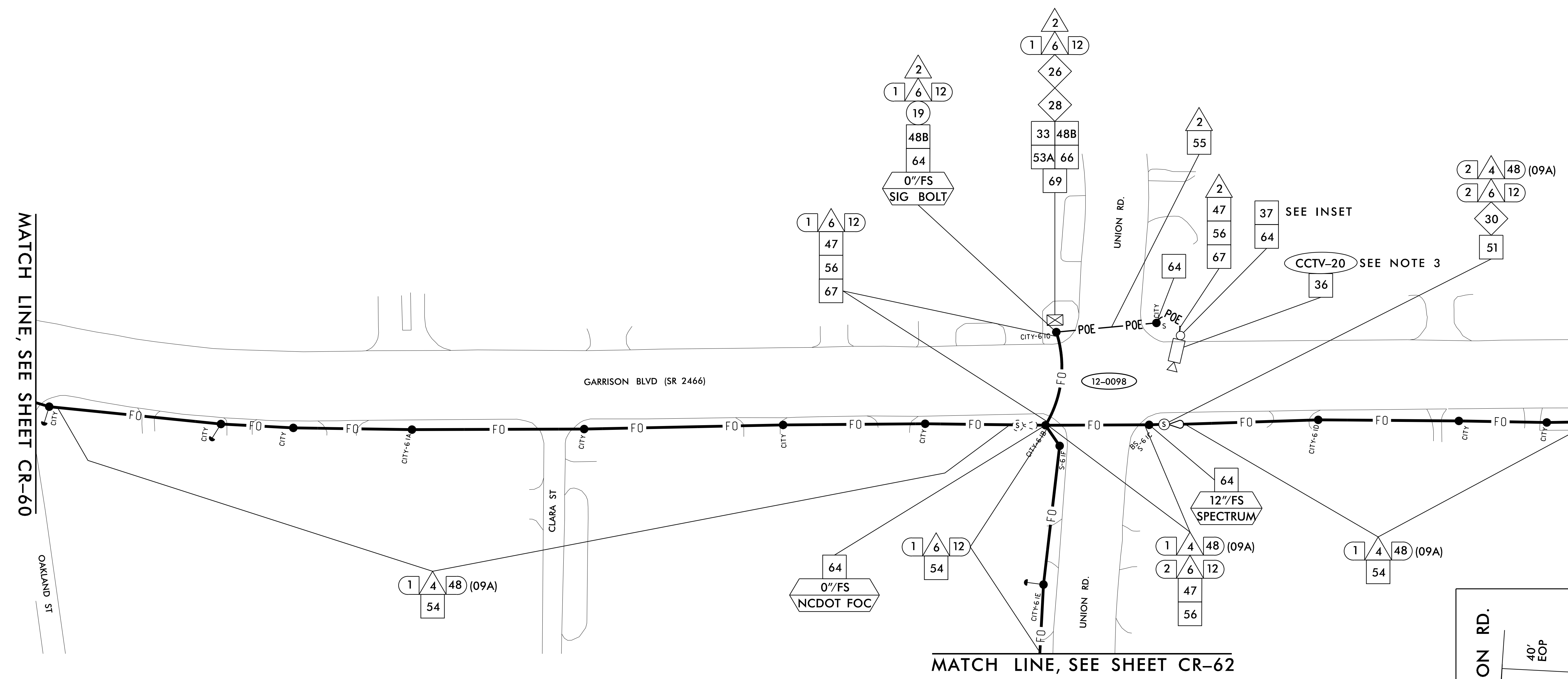
SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 028952  
 I. VAN OSDELL  
 DATE 3/18/2022  
 CADD File name:

3/17/2022 K:\ARL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\_SHT060\_CR.dgn



MATCH LINE, SEE SHEET CR-60

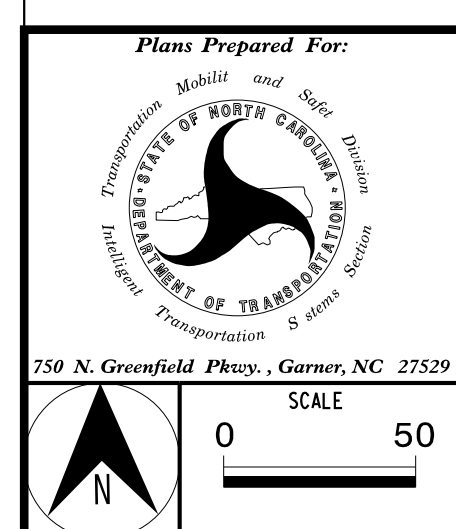
MATCH LINE, SEE SHEET CR-63



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.
- INSTALL CCTV CAMERA ON NEW POLE AT 35 FT. SEE ITS-12.



CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN	
DIVISION 12	GASTON COUNTY
PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL
REVISIONS	INIT. DATE

**Kimley»Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050

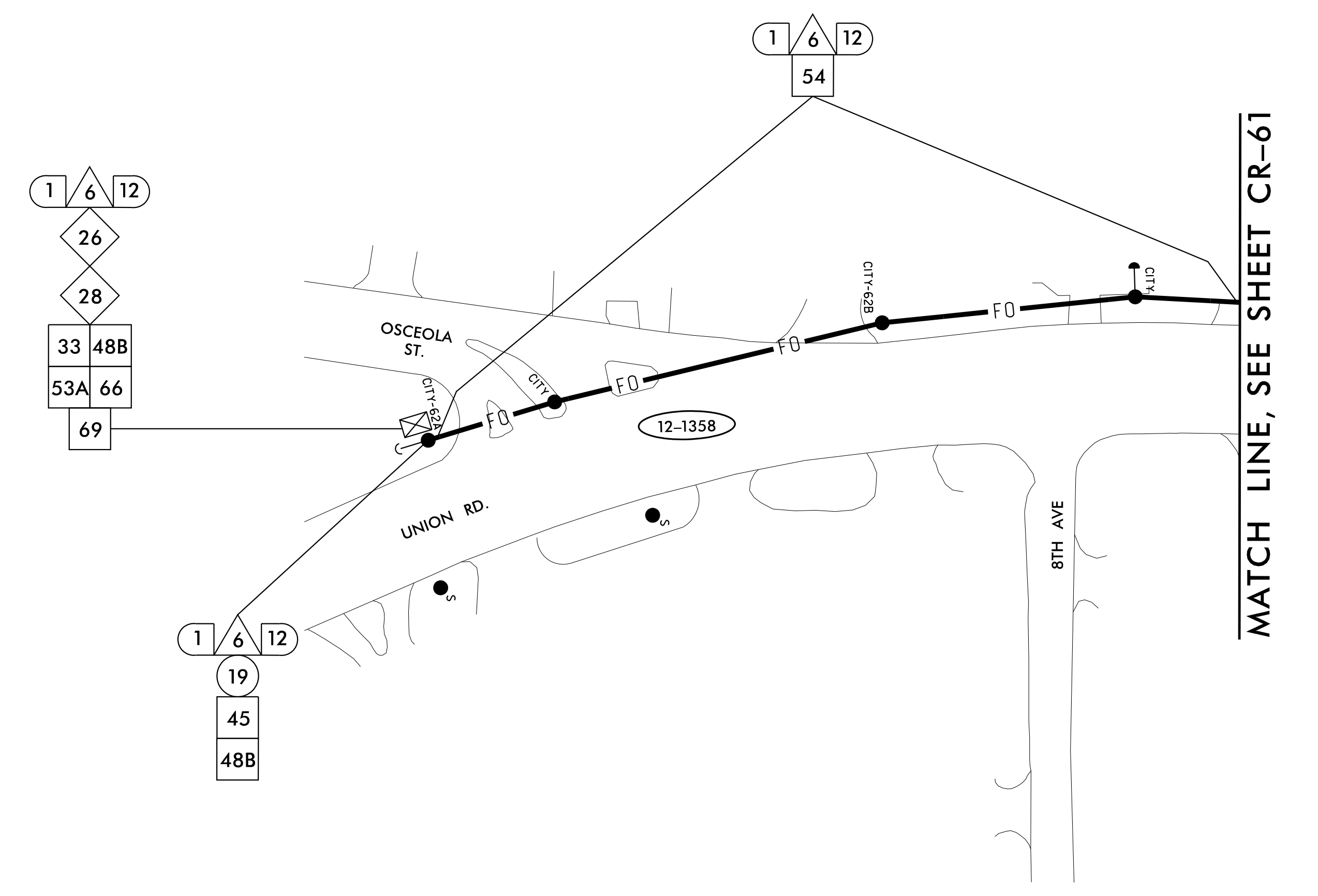
SEAL

**North Carolina Professional Engineer**  
No. 27529

DocuSigned by:  
Inger Van OsdeLL  
3/18/2022

CADD File name:

3/17/2022 K:\RAL\TPTD\_LITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH061\_CR.dgn

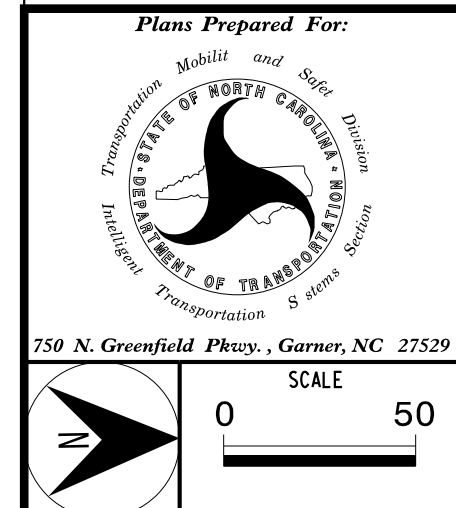


3/17/2022 K:\ARL\TPTD\ITS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH062\_Cr.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

**NOTES:**  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021	REVIEWED BY: K. SMITH
PREPARED BY: S. BUTLER	REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

0 SCALE 50

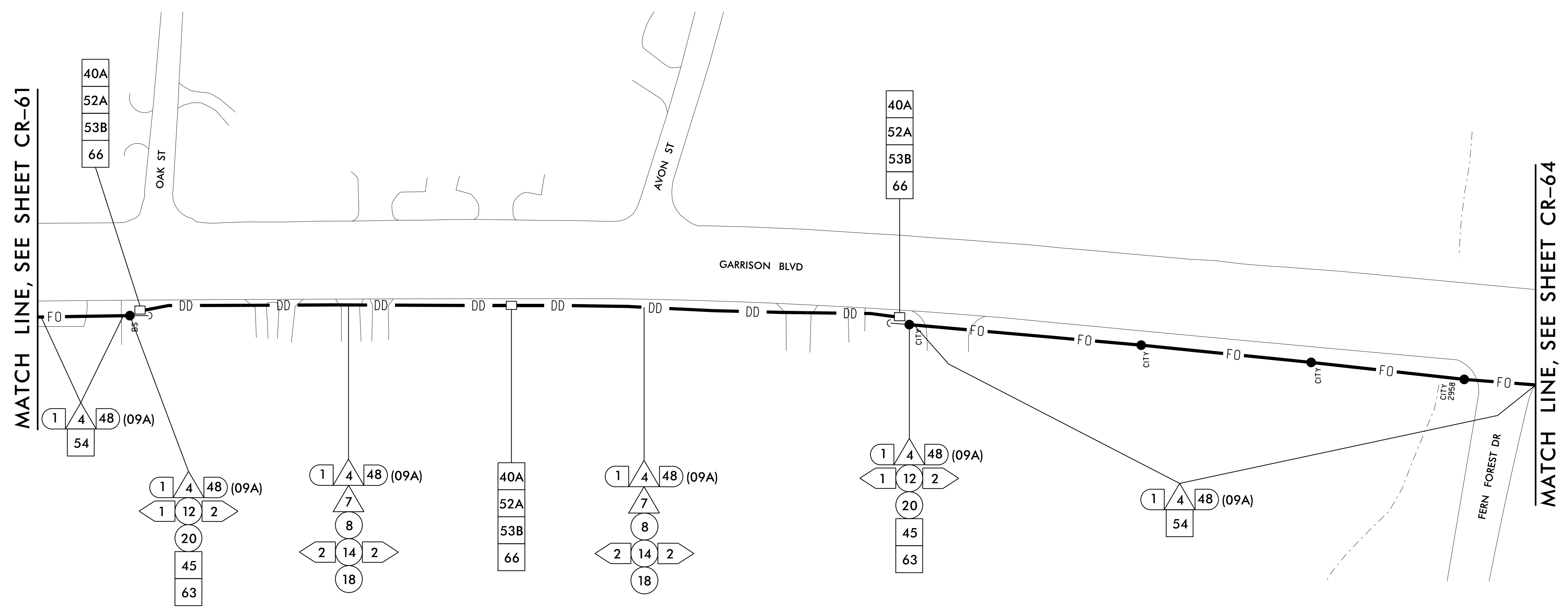
SEAL

**North Carolina Professional Engineer**  
 SEAL 028952  
 I. VAN OSDELL

DocuSigned by:  
 Iger Van Osdel  
 3/18/2022

CADD Filename:





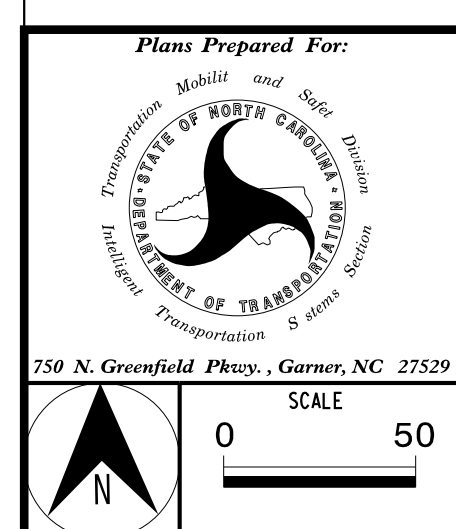
MATCH LINE, SEE SHEET CR-61

MATCH LINE, SEE SHEET CR-64

3/17/2022 KARAL.TPTD.LTS\01036569\_Gastonia\_SignalSystem\6\_Tasks\Plans\Cable\_Routing\SH063\_CR.dgn

1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
									63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM	

NOTES:  
 1. ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.  
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



Plans Prepared For:

**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

Scale: 0 50

**Kimley»Horn**  
 NC License #F-0102  
 421 Fayetteville St., Suite 600  
 Raleigh, NC 27601  
 Tel: (919) 677-2000  
 Fax: (919) 677-2050

SEAL

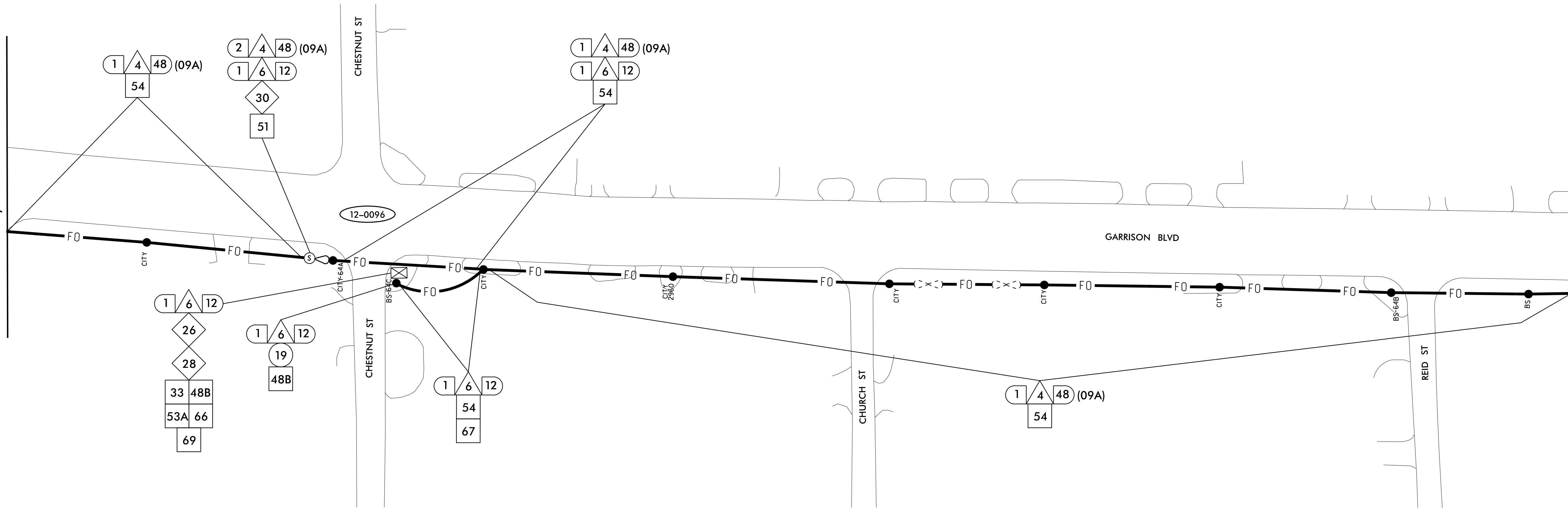
**North Carolina Professional Engineer**  
 SEAL 028952  
 IGER V. VAN OSDEL

DocuSigned by:  
 Iger Van Osdel  
 3/18/2022

CADD File name:

MATCH LINE, SEE SHEET CR-63

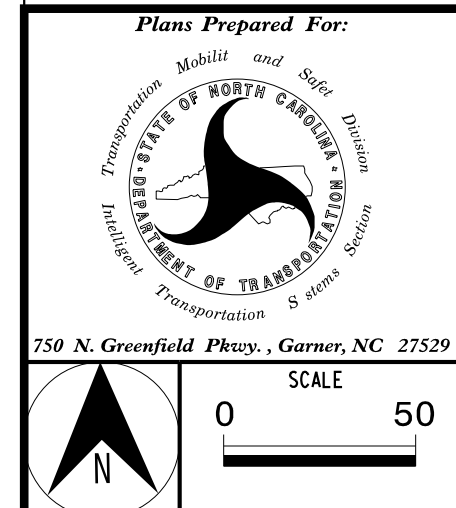
MATCH LINE, SEE SHEET CR-65



1	INSTALL COAX CABLE	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	34	INSTALL CABINET FOUNDATION	44	INSTALL AERIAL GUY ASSEMBLY	53A	STORE 20 FEET OF COMMUNICATIONS CABLE	64	BOND MESSENGER CABLE TO POLE GROUND
2	INSTALL ETHERNET CABLE	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	45	INSTALL STANDARD GUY ASSEMBLY	53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	65	INSTALL HEAT SHRINK TUBING RETROFIT KIT
3	EXISTING ETHERNET (OR COAX) CABLE	14	INSTALL POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	36	INSTALL CCTV CAMERA ASSEMBLY	46	INSTALL SIDEWALK GUY ASSEMBLY	54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	66	INSTALL MOLDBABLE DUCT SEAL
4	INSTALL SMFO CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL NEW ETHERNET EDGE SWITCH	37	INSTALL CCTV CAMERA WOOD POLE	47	INSTALL MESSENGER CABLE	55	LASH CABLE(S) TO EXISTING MESSENGER / SIGNAL CABLE	67	SLACK SPAN
5	EXISTING SMFO CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW FIBER OPTIC TRANSCEIVER	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	56	LASH CABLE(S) TO NEW MESSENGER CABLE	68	INSTALL CABINET BASE ADAPTER
6	INSTALL FIBER OPTIC DROP CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET	39	INSTALL JUNCTION BOX	48B	REMOVE EXISTING COMMUNICATIONS CABLE	57	MODIFY EXISTING ELECTRICAL SERVICE	69	REMOVE EXISTING SIGNAL CABINET AND CONTROLLER
7	INSTALL TRACER WIRE	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	40A	INSTALL OVERSIZED JUNCTION BOX	49	BACK PULL EXISTING COMMUNICATIONS CABLE	58	INSTALL NEW ELECTRICAL SERVICE	70	REMOVE EXISTING CCTV CAMERA ASSEMBLY
8	TRENCH	19	INSTALL CABLE(S) IN EXISTING RISER	30	INSTALL AERIAL SPLICE ENCLOSURE	40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	50	INSTALL CELL MODEM AND ANTENNA	59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	71	REMOVE EXISTING CCTV CAMERA CABINET
9	INSTALL PVC CONDUIT	20	INSTALL CABLE(S) IN NEW RISER	31	MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE	41	REMOVE EXISTING JUNCTION BOX	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	72	REMOVE CABINET FOUNDATION
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS	32	INSTALL POLE MOUNTED 336S SIGNAL CABINET AND CONTROLLER	42	INSTALL WOOD POLE	52A	INSTALL DELINEATOR MARKER	61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	73	MODIFY EXISTING CABINET FOUNDATION
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	33	INSTALL BASE MOUNTED 332 SIGNAL CABINET WITH EXTENDER AND CONTROLLER	43	REMOVE EXISTING WOOD POLE	52B	INSTALL JUNCTION BOX MARKER	62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	74	REMOVE EXISTING WIRELESS SYSTEM
								63	BOND RISER TO POLE GROUND	75	INSTALL WIRELESS ETHERNET SYSTEM		

**NOTES:**

- ATTACH NEW COMMUNICATIONS CABLE TO FRONT SIDE OF POLE AT 40 INCHES BELOW POWER PRESENCE UNLESS OTHERWISE NOTED.
- MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY UNLESS OTHERWISE NOTED.



**CITY OF GASTONIA COMPUTERIZED SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLAN**

DIVISION 12 GASTON COUNTY

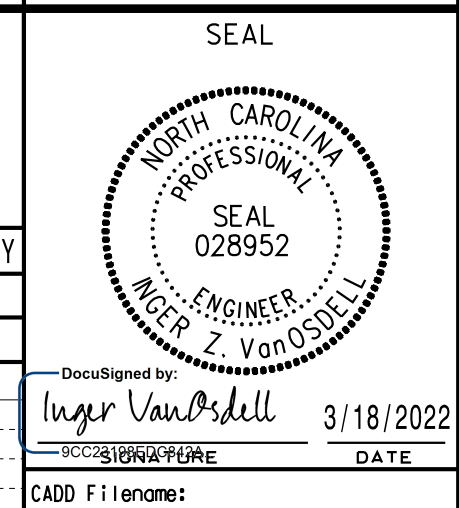
PLAN DATE: DECEMBER 2021 REVIEWED BY: K. SMITH

PREPARED BY: S. BUTLER REVIEWED BY: I. VAN OSDELL

REVISIONS	INIT.	DATE

**Kimley-Horn**

NC License #F-0102  
421 Fayetteville St., Suite 600  
Raleigh, NC 27601  
Tel: (919) 677-2000  
Fax: (919) 677-2050



3/17/2022 KARAL.TPTD.LTS\01036569 Gastonia SignalSystem\6 Tasks\Plans\Cable Routing\SH064\_Cr.dgn