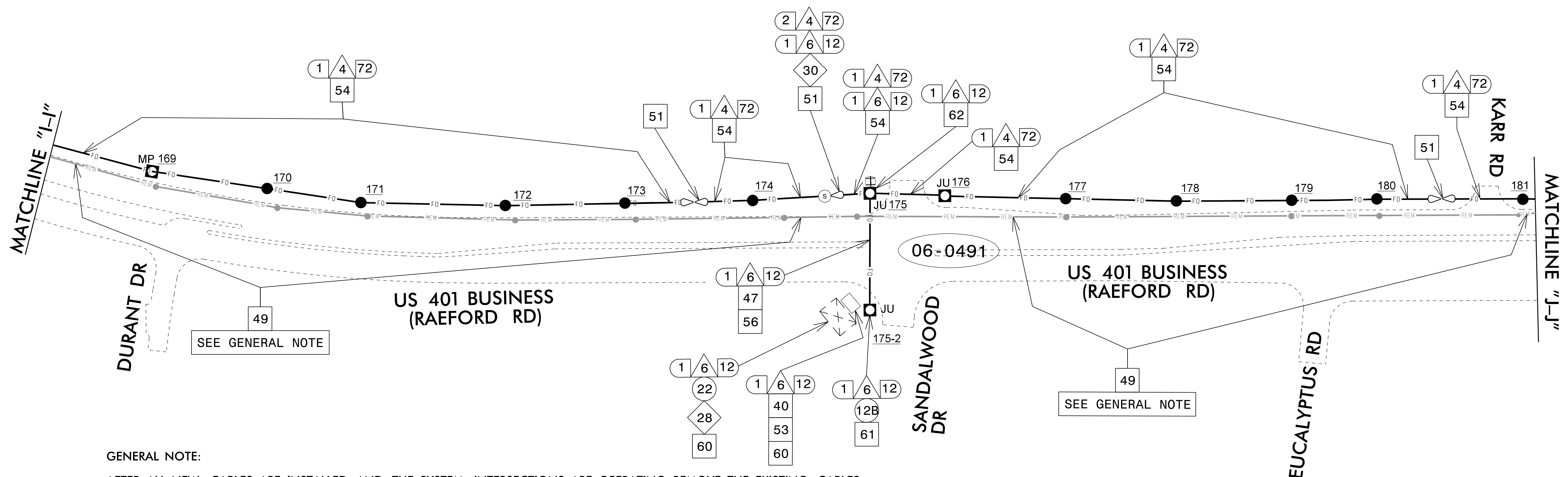


**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**



GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC. PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

1. INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	15. DIRECTIONAL DRILL CONDUIT	30. INSTALL AERIAL SPlice ENCLOSURE	46. INSTALL SIDEWALK GUY ASSEMBLY
2. INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	16. BORE AND JACK CONDUIT	31. INSTALL POLE MOUNTED CABINET	47. INSTALL MESSENGER CABLE
3. INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	32. INSTALL BASE MOUNTED SPlice CABINET (336) WITH EXTEND BASE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE
4. INSTALL SMFO CABLE	18. INSTALL CABLE(S) IN NEW CONDUIT	33. REMOVE EXISTING SPlice CABINET	49. REMOVE EXISTING COMMUNICATIONS CABLE
5. INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (PcE)	19. INSTALL CABLE(S) IN EXISTING RISER	34. INSTALL CABINET FOUNDATION	50. INSTALL ETHERNET SWITCH
6. INSTALL FIBER OPTIC DROP CABLE	20. INSTALL CABLE(S) IN NEW RISER	35. REMOVE EXISTING CABINET FOUNDATION	51. INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
7. INSTALL TRACER WIRE	21. INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS	36. INSTALL CCTV CAMERA ASSEMBLY	52. INSTALL DELINEATOR MARKER
8. TRENCH	22. INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	37. INSTALL CCTV CAMERA WOOD POLE	53. STORE 50 FEET OF COMMUNICATIONS CABLE
9. INSTALL PVC CONDUIT	23. INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	38. INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	54. LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	24. INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	39. INSTALL JUNCTION BOX	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE
11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	25. INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	40. INSTALL OVERSIZED JUNCTION BOX	56. LASH CABLE(S) TO NEW MESSENGER CABLE
12A. INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	26. TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	41. REMOVE EXISTING JUNCTION BOX	57. MODIFY EXISTING ELECTRICAL SERVICE
12B. INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE.	27. INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	42. INSTALL WOOD POLE	58. INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV
13. INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	28. INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPlice CABLE IN CABINET	43. REMOVE EXISTING WOOD POLE	59. INSTALL NEW BASE MOUNTED CABINET (336)
14. INSTALL POLYETHYLENE CONDUIT	29. INSTALL UNDERGROUND SPlice ENCLOSURE	44. INSTALL AERIAL GUY ASSEMBLY	60. SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL
		45. INSTALL STANDARD GUY ASSEMBLY	61. ROUTE CABLE(S) INSIDE METAL POLE AND OUT TO SIGNAL CABINET. USE EXISTING JUNCTION BOXES AND CONDUIT SYSTEMS WHEN AVAILABLE. ENSURE FIBER CABLES DO NOT SHARE JUNCTION BOXES AND CONDUIT SYSTEMS WITH SIGNAL CABLES OR OTHER 120 VOLT CURRENT CARRYING CONDUCTORS.
			62. INSTALL TEMPORARY DROP CABLE MAINTENANCE LOOP WITH CABLE BRACKET
			SPC. PROPOSED TEMPORARY DROP CABLE MAINTENANCE LOOP WITH CABLE BRACKET.
			TV. EXISTING CCTV CABINET
			FO. NEW FIBER OPTIC COMMUNICATIONS CABLE
			REM. EXISTING COMMUNICATIONS CABLE TO BE REMOVED OR RELOCATED
			PP. EXISTING POWER PEDESTAL
			174. UTILITY POLE TAG NUMBER
			JU. JOINT USE POLE
			MP. METAL POLE

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

PHASE II FIBER TRUNK CABLE INSTALLATION

Prepared for the Offices of:
 STATE OF NORTH CAROLINA
750 N. Greenfield Plaza, Garner, NC 27529

US 401 BUSINESS (RAEFORD ROAD) SIGNAL SYSTEM AND COMMUNICATIONS CABLE / CONDUIT ROUTING PLANS

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

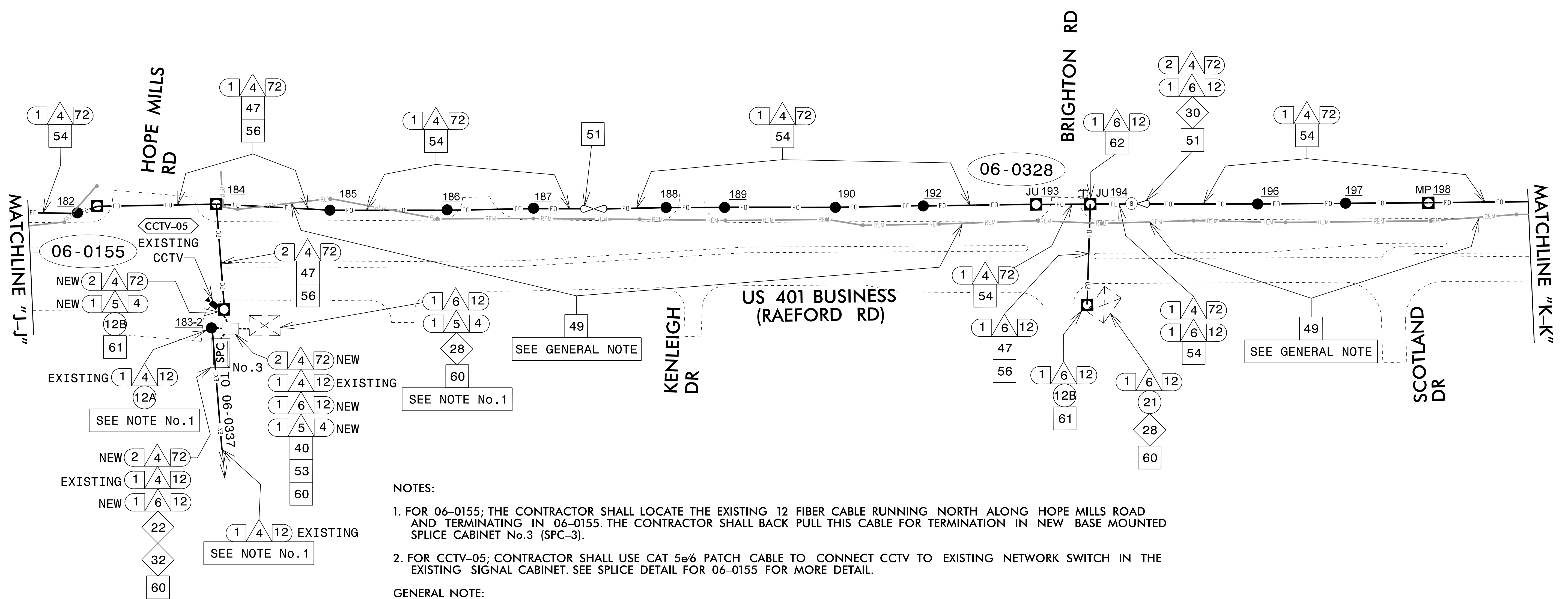
PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

REVISIONS	INIT.	DATE

SEAL

DocuSigned by:
Lawrence E. Overton 3/29/2018

3/27/2018 U:*171001766*tr\transportation\des\ign*tr\off\c\5\ign\des\ign*its U-4405*SCP Cable Routing.dgn U-4405*SCP_12-180329.dgn j.ingram



NOTES:

- FOR 06-0155; THE CONTRACTOR SHALL LOCATE THE EXISTING 12 FIBER CABLE RUNNING NORTH ALONG HOPE MILLS ROAD AND TERMINATING IN 06-0155. THE CONTRACTOR SHALL BACK PULL THIS CABLE FOR TERMINATION IN NEW BASE MOUNTED SPLICE CABINET No.3 (SPC-3).
- FOR CCTV-05; CONTRACTOR SHALL USE CAT 5e/6 PATCH CABLE TO CONNECT CCTV TO EXISTING NETWORK SWITCH IN THE EXISTING SIGNAL CABINET. SEE SPLICE DETAIL FOR 06-0155 FOR MORE DETAIL.

GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC.
 PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

1. INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	15. DIRECTIONAL DRILL CONDUIT	30. INSTALL AERIAL SPLICE ENCLOSURE	46. INSTALL SIDEWALK GUY ASSEMBLY
2. INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	16. BORE AND JACK CONDUIT	31. INSTALL POLE MOUNTED CABINET	47. INSTALL MESSENGER CABLE
3. INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	32. INSTALL BASE MOUNTED SPLICE CABINET (336) WITH EXTEND BASE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE
4. INSTALL SMFO CABLE	18. INSTALL CABLE(S) IN NEW CONDUIT	33. REMOVE EXISTING SPLICE CABINET	49. REMOVE EXISTING COMMUNICATIONS CABLE
5. INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (PcE)	19. INSTALL CABLE(S) IN EXISTING RISER	34. INSTALL CABINET FOUNDATION	50. INSTALL ETHERNET SWITCH
6. INSTALL FIBER OPTIC DROP CABLE	20. INSTALL CABLE(S) IN NEW RISER	35. REMOVE EXISTING CABINET FOUNDATION	51. INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
7. INSTALL TRACER WIRE	21. INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS	36. INSTALL CCTV CAMERA ASSEMBLY	52. INSTALL DELINEATOR MARKER
8. TRENCH	22. INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	37. INSTALL CCTV CAMERA WOOD POLE	53. STORE 50 FEET OF COMMUNICATIONS CABLE
9. INSTALL PVC CONDUIT	23. INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	38. INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	54. LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	24. INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	39. INSTALL JUNCTION BOX	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE
11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	25. INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	40. INSTALL OVERSIZED JUNCTION BOX	56. LASH CABLE(S) TO NEW MESSENGER CABLE
12A. INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	26. TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	41. REMOVE EXISTING JUNCTION BOX	57. MODIFY EXISTING ELECTRICAL SERVICE
12B. INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE.	27. INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	42. INSTALL WOOD POLE	58. INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV
13. INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	28. INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	43. REMOVE EXISTING WOOD POLE	59. INSTALL NEW BASE MOUNTED CABINET (336)
14. INSTALL POLYETHYLENE CONDUIT	29. INSTALL UNDERGROUND SPLICE ENCLOSURE	44. INSTALL AERIAL GUY ASSEMBLY	60. SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL

Stantec Consulting Services Inc.
 801 Jones Franklin Road
 Suite 300
 Raleigh, NC 27606
 Tel. (919) 851-6866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

PHASE II FIBER TRUNK CABLE INSTALLATION

US 401 BUSINESS (RAEFORD ROAD) SIGNAL SYSTEM AND COMMUNICATIONS CABLE / CONDUIT ROUTING PLANS

Prepared for the Offices of:

 DIVISION 06 CUMBERLAND CO. FAYETTEVILLE
 PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS
 PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

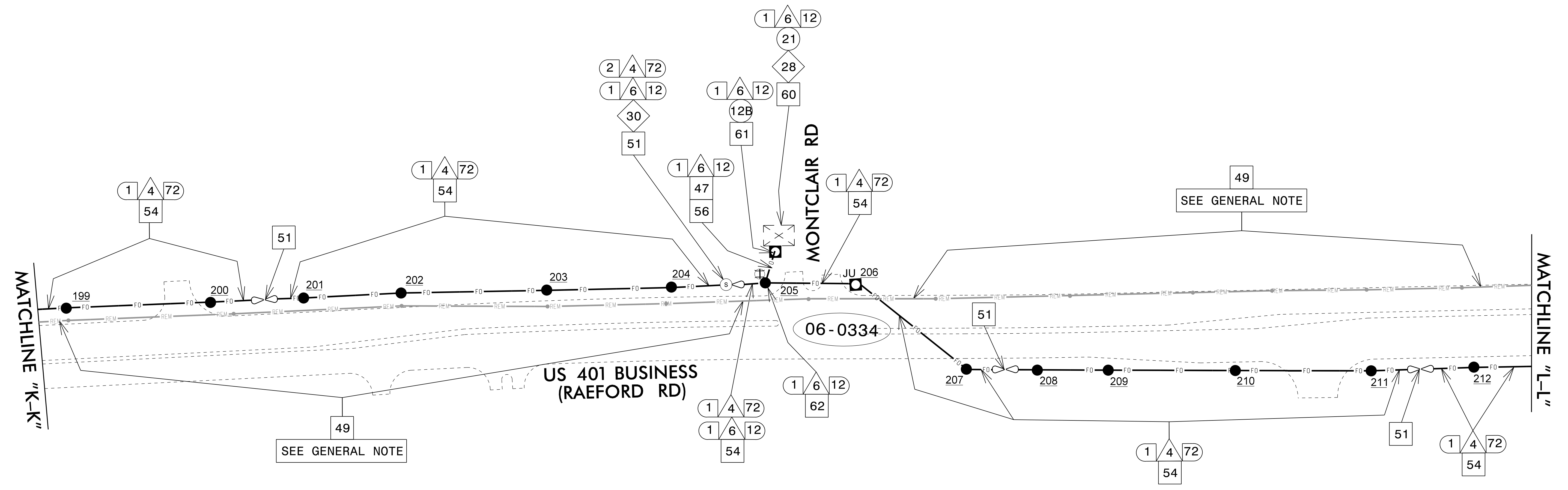
750 N. Greenfield Plaza, Garner, NC 27529

SCALE: NTS

DocuSigned by:

 LAWRENCE E. OVERMIRE
 ENGINEER
 SEAL 045933
 DATE: 3/29/2018

3/27/2018
 U:*171001766*tr\transportation\design\tr\off\c\5\signal\des\ign\ITS U-4405*SCP Cable Routing.dgn
 j:ingram



GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC.
 PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

- | | |
|---|---|
| <ul style="list-style-type: none"> 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE 2 INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE 3 INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE 4 INSTALL SMFO CABLE 5 INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (PoE) 6 INSTALL FIBER OPTIC DROP CABLE 7 INSTALL TRACER WIRE 8 TRENCH 9 INSTALL PVC CONDUIT 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD 12A INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL 12B INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE. 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT 14 INSTALL POLYETHYLENE CONDUIT 15 DIRECTIONAL DRILL CONDUIT 16 BORE AND JACK CONDUIT 17 INSTALL CABLE(S) IN EXISTING CONDUIT 18 INSTALL CABLE(S) IN NEW CONDUIT 19 INSTALL CABLE(S) IN EXISTING RISER 20 INSTALL CABLE(S) IN NEW RISER 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE) 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE) 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET 27 INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPICE CABLE IN CABINET 29 INSTALL UNDERGROUND SPICE ENCLOSURE 30 INSTALL AERIAL SPICE ENCLOSURE 31 INSTALL POLE MOUNTED CABINET 32 INSTALL BASE MOUNTED SPICE CABINET (336) WITH EXTEND BASE 33 REMOVE EXISTING SPICE CABINET 34 INSTALL CABINET FOUNDATION 35 REMOVE EXISTING CABINET FOUNDATION 36 INSTALL CCTV CAMERA ASSEMBLY 37 INSTALL CCTV CAMERA WOOD POLE 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION 39 INSTALL JUNCTION BOX 40 INSTALL OVERSIZED JUNCTION BOX 41 REMOVE EXISTING JUNCTION BOX 42 INSTALL WOOD POLE 43 REMOVE EXISTING WOOD POLE 44 INSTALL AERIAL GUY ASSEMBLY 45 INSTALL STANDARD GUY ASSEMBLY 46 INSTALL SIDEWALK GUY ASSEMBLY 47 INSTALL MESSENGER CABLE 48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE 49 REMOVE EXISTING COMMUNICATIONS CABLE 50 INSTALL ETHERNET SWITCH 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE 52 INSTALL DELINEATOR MARKER 53 STORE 50 FEET OF COMMUNICATIONS CABLE 54 LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE 56 LASH CABLE(S) TO NEW MESSENGER CABLE 57 MODIFY EXISTING ELECTRICAL SERVICE 58 INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV 59 INSTALL NEW BASE MOUNTED CABINET (336) 60 SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL 61 ROUTE CABLE(S) INSIDE METAL POLE AND OUT TO SIGNAL CABINET. USE EXISTING JUNCTION BOXES AND CONDUIT SYSTEMS WHEN AVAILABLE. ENSURE FIBER CABLES DO NOT SHARE JUNCTION BOXES AND CONDUIT SYSTEMS WITH SIGNAL CABLES OR OTHER 120 VOLT CURRENT CARRYING CONDUCTORS. 62 INSTALL TEMPORARY DROP CABLE MAINTENANCE LOOP WITH CABLE BRACKET | <ul style="list-style-type: none"> SPC NEW SPICE CABINET, BASE MOUNTED TV EXISTING CCTV CABINET FO NEW FIBER OPTIC COMMUNICATIONS CABLE REM EXISTING COMMUNICATIONS CABLE TO BE REMOVED OR RELOCATED PP EXISTING POWER PEDESTAL 174 UTILITY POLE TAG NUMBER JU JOINT USE POLE MP METAL POLE |
|---|---|

Stantec Consulting Services Inc.
 801 Jones Franklin Road
 Suite 300
 Raleigh, NC 27606
 Tel. (919) 851-6866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

PHASE II FIBER TRUNK CABLE INSTALLATION

Prepared for the Offices of:

750 N. Greenfield Plaza, Garner, NC 27529

**US 401 BUSINESS (RAEFORD ROAD)
 SIGNAL SYSTEM AND
 COMMUNICATIONS CABLE /
 CONDUIT ROUTING PLANS**

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

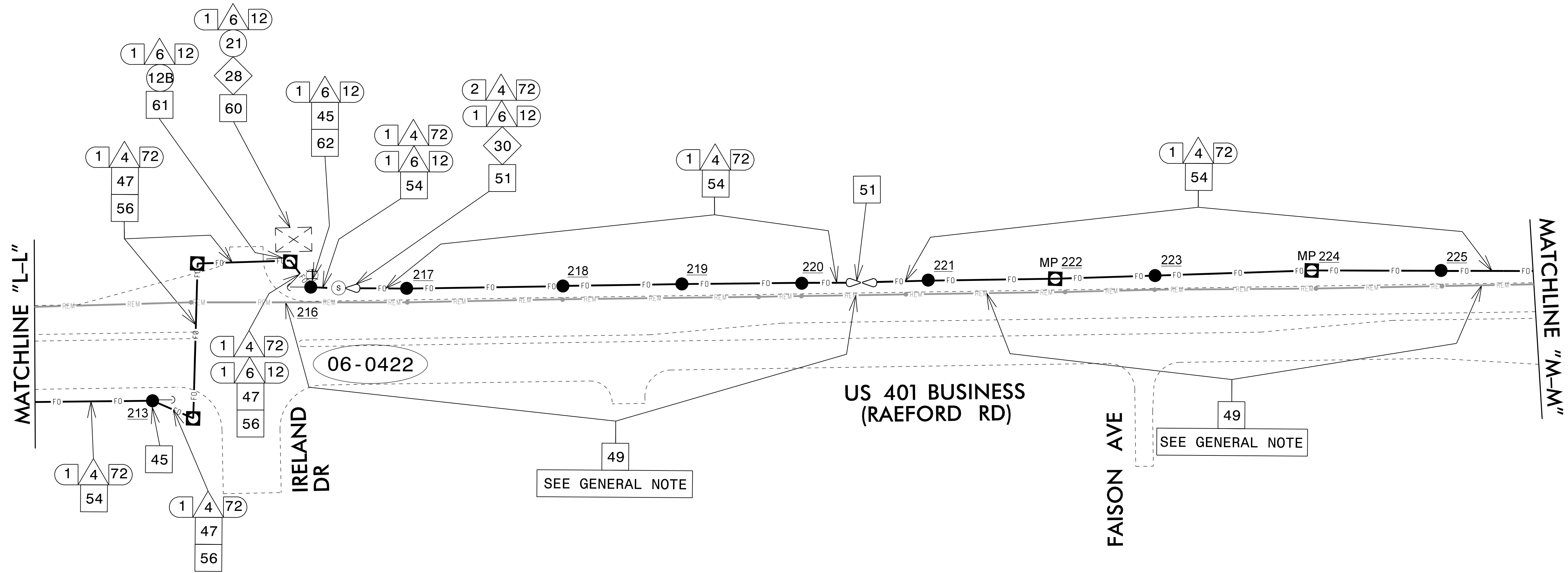
PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

REVISIONS	INIT.	DATE

SEAL

Lawrence E. Overton
 3/29/2018
 CADD FILE NAME


3/27/2018 U:*171001766*tr\transportation\des\ign*tr\off\c\signal\des\ign*its U-4405*SCP Cable Routing.dgn F:\les*260_70_U-4405_SCP_14_180329.dgn j.ingram



GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC. PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

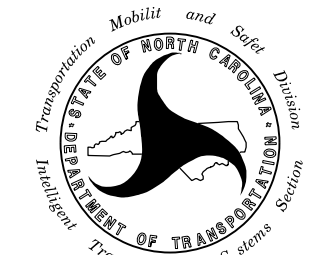
- | | |
|---|---|
| <ul style="list-style-type: none"> 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE 2 INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE 3 INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE 4 INSTALL SMFO CABLE 5 INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (PoE) 6 INSTALL FIBER OPTIC DROP CABLE 7 INSTALL TRACER WIRE 8 TRENCH 9 INSTALL PVC CONDUIT 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD 12A INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL 12B INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE. 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT 14 INSTALL POLYETHYLENE CONDUIT 15 DIRECTIONAL DRILL CONDUIT 16 BORE AND JACK CONDUIT 17 INSTALL CABLE(S) IN EXISTING CONDUIT 18 INSTALL CABLE(S) IN NEW CONDUIT 19 INSTALL CABLE(S) IN EXISTING RISER 20 INSTALL CABLE(S) IN NEW RISER 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE) 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE) 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET 27 INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPICE CABLE IN CABINET 29 INSTALL UNDERGROUND SPICE ENCLOSURE 30 INSTALL AERIAL SPICE ENCLOSURE 31 INSTALL POLE MOUNTED CABINET 32 INSTALL BASE MOUNTED SPICE CABINET (336) WITH EXTEND BASE 33 REMOVE EXISTING SPICE CABINET 34 INSTALL CABINET FOUNDATION 35 REMOVE EXISTING CABINET FOUNDATION 36 INSTALL CCTV CAMERA ASSEMBLY 37 INSTALL CCTV CAMERA WOOD POLE 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION 39 INSTALL JUNCTION BOX 40 INSTALL OVERSIZED JUNCTION BOX 41 REMOVE EXISTING JUNCTION BOX 42 INSTALL WOOD POLE 43 REMOVE EXISTING WOOD POLE 44 INSTALL AERIAL GUY ASSEMBLY 45 INSTALL STANDARD GUY ASSEMBLY 46 INSTALL SIDEWALK GUY ASSEMBLY 47 INSTALL MESSENGER CABLE 48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE 49 REMOVE EXISTING COMMUNICATIONS CABLE 50 INSTALL ETHERNET SWITCH 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE 52 INSTALL DELINEATOR MARKER 53 STORE 50 FEET OF COMMUNICATIONS CABLE 54 LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE 56 LASH CABLE(S) TO NEW MESSENGER CABLE 57 MODIFY EXISTING ELECTRICAL SERVICE 58 INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV 59 INSTALL NEW BASE MOUNTED CABINET (336) 60 SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL 61 ROUTE CABLE(S) INSIDE METAL POLE AND OUT TO SIGNAL CABINET. USE EXISTING JUNCTION BOXES AND CONDUIT SYSTEMS WHEN AVAILABLE. ENSURE FIBER CABLES DO NOT SHARE JUNCTION BOXES AND CONDUIT SYSTEMS WITH SIGNAL CABLES OR OTHER 120 VOLT CURRENT CARRYING CONDUCTORS. 62 INSTALL TEMPORARY DROP CABLE MAINTENANCE LOOP WITH CABLE BRACKET | <ul style="list-style-type: none"> SPC NEW SPICE CABINET, BASE MOUNTED TV EXISTING CCTV CABINET FO NEW FIBER OPTIC COMMUNICATIONS CABLE REM EXISTING COMMUNICATIONS CABLE TO BE REMOVED OR RELOCATED PP EXISTING POWER PEDESTAL 174 UTILITY POLE TAG NUMBER JU JOINT USE POLE MP METAL POLE |
|---|---|



Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

PHASE II FIBER TRUNK CABLE INSTALLATION

Prepared for the Offices of:



750 N. Greenfield Plaza, Garner, NC 27529

**US 401 BUSINESS (RAEFORD ROAD)
SIGNAL SYSTEM AND
COMMUNICATIONS CABLE /
CONDUIT ROUTING PLANS**

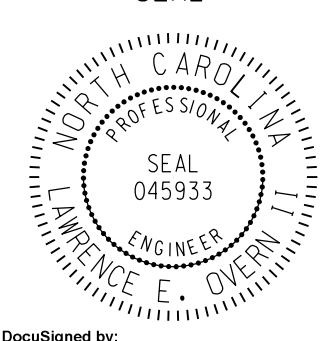
DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

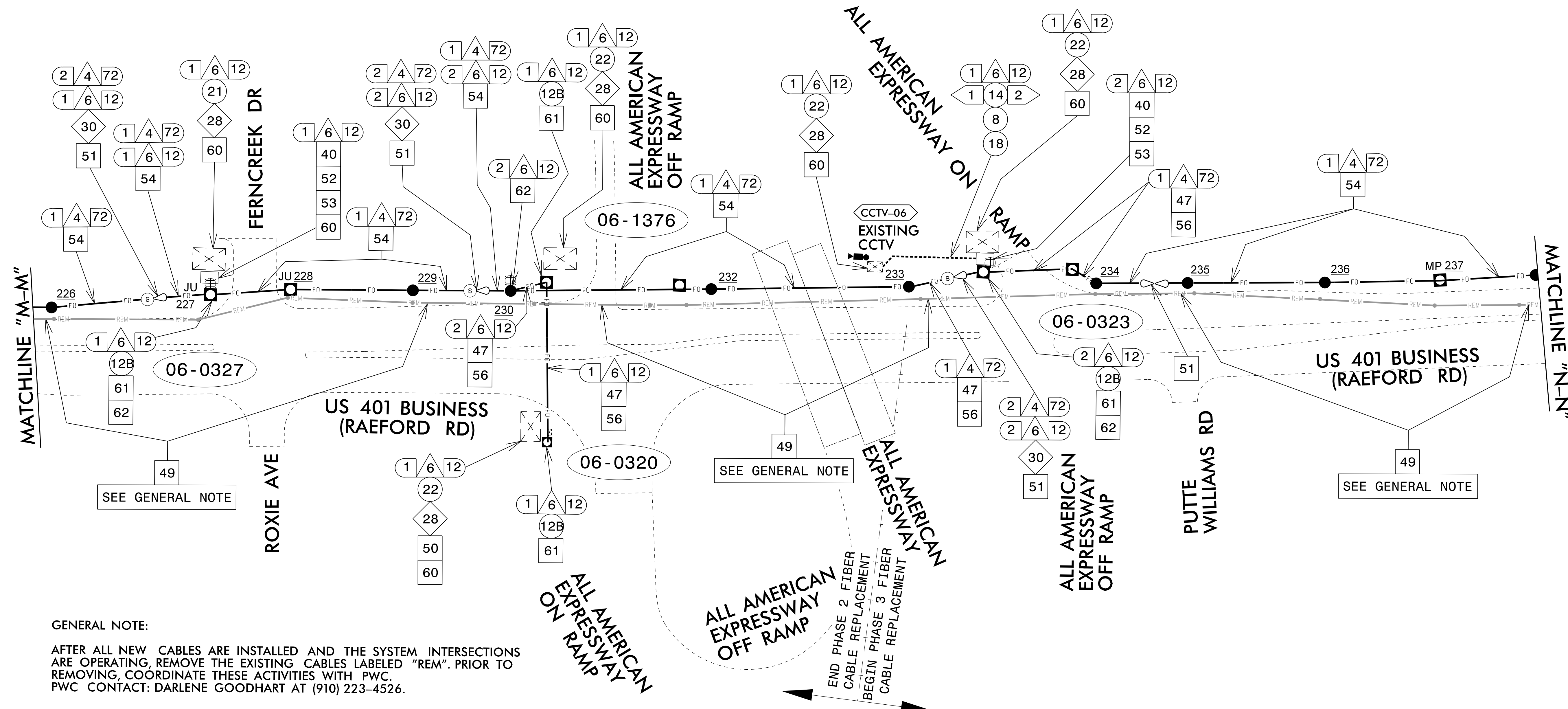
REVISIONS	INIT.	DATE

SEAL



Lawrence E. Overton
Professional Engineer
045933
DATE: 3/29/2018

3/27/2018 U:\17100\1766\transportation\design\tr\off\c\5\signal\des\ign\ITS U-4405\SCP Cable Routing.dgn U-4405\SCP Cable Routing.dgn
 j.ingram



GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC. PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

- 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 2 INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 3 INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE
- 4 INSTALL SMFO CABLE
- 5 INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (Pc)
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12A INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
- 12B INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE.
- 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 27 INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPlice CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPlice ENCLOSURE
- 30 INSTALL AERIAL SPlice ENCLOSURE
- 31 INSTALL POLE MOUNTED CABINET
- 32 INSTALL BASE MOUNTED SPlice CABINET (336) WITH EXTEND BASE
- 33 REMOVE EXISTING SPlice CABINET
- 34 INSTALL CABINET FOUNDATION
- 35 REMOVE EXISTING CABINET FOUNDATION
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 REMOVE EXISTING JUNCTION BOX
- 42 INSTALL WOOD POLE
- 43 REMOVE EXISTING WOOD POLE
- 44 INSTALL AERIAL GUY ASSEMBLY
- 45 INSTALL STANDARD GUY ASSEMBLY
- 46 INSTALL SIDEWALK GUY ASSEMBLY
- 47 INSTALL MESSENGER CABLE
- 48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE
- 49 REMOVE EXISTING COMMUNICATIONS CABLE
- 50 INSTALL ETHERNET SWITCH
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
- 52 INSTALL DELINEATOR MARKER
- 53 STORE 50 FEET OF COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE
- 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE
- 56 LASH CABLE(S) TO NEW MESSENGER CABLE
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV
- 59 INSTALL NEW BASE MOUNTED CABINET (336)
- 60 SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL
- 61 ROUTE CABLE(S) INSIDE METAL POLE AND OUT TO SIGNAL CABINET. USE EXISTING JUNCTION BOXES AND CONDUIT SYSTEMS WHEN AVAILABLE. ENSURE FIBER CABLES DO NOT SHARE JUNCTION BOXES AND CONDUIT SYSTEMS WITH SIGNAL CABLES OR OTHER 120 VOLT CURRENT CARRYING CONDUCTORS.
- 62 INSTALL TEMPORARY DROP CABLE MAINTENANCE LOOP WITH CABLE BRACKET

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

**END OF PHASE II AND BEGINNING OF PHASE III
FIBER TRUNK CABLE INSTALLATION**

Prepared for the Offices of:

750 N. Greenfield Plaza, Garner, NC 27529

**US 401 BUSINESS (RAEFORD ROAD)
SIGNAL SYSTEM AND
COMMUNICATIONS CABLE /
CONDUIT ROUTING PLANS**

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

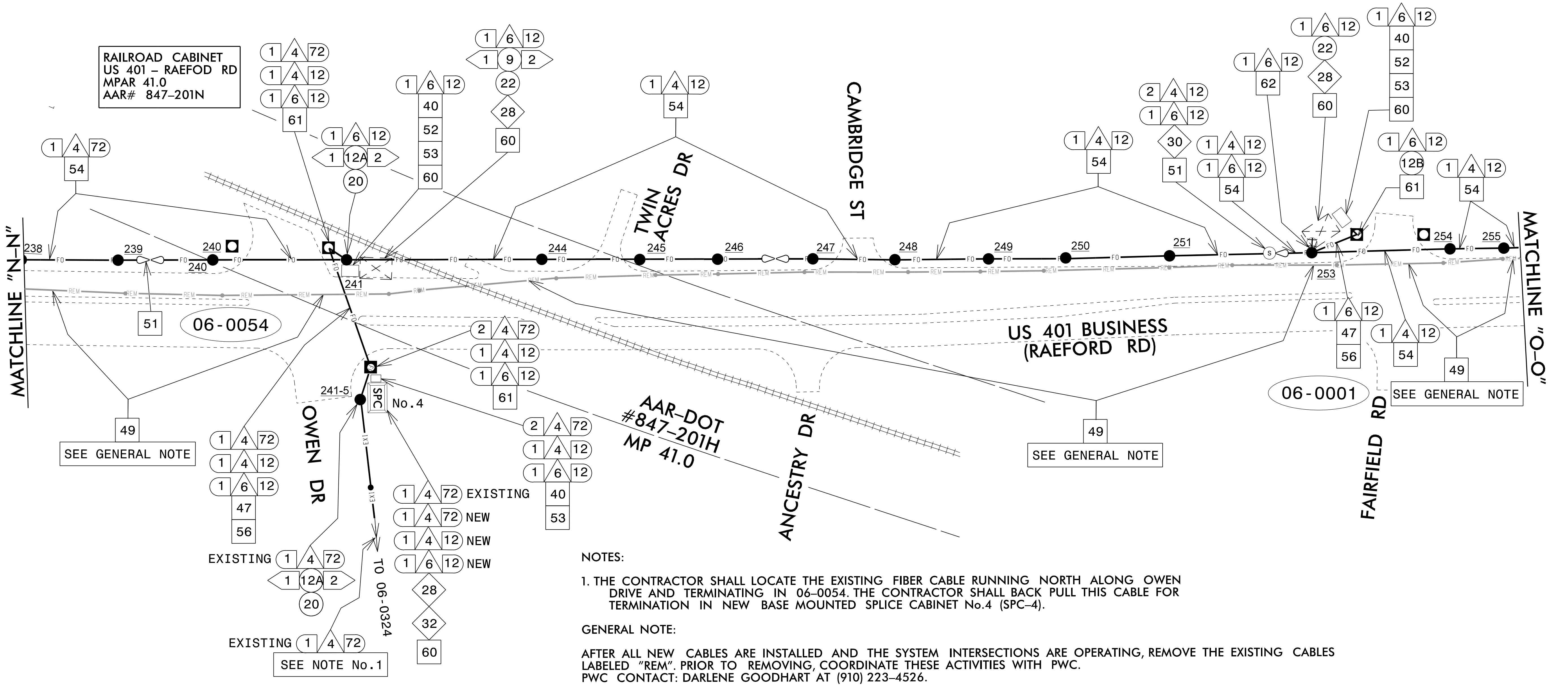
PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

SCALE: NTS

SEAL

Lawrence E. Overton
Professional Engineer
No. 045933
Date: 3/29/2018

3/27/2018 U:*171001766*transportation\des\ign*Tr\off\c\sig\gn\des\ign*ITS U-4405*SCP Cable Routing.dgn U-4405*SCP-16-180329.dgn j.ingram



NOTES:

1. THE CONTRACTOR SHALL LOCATE THE EXISTING FIBER CABLE RUNNING NORTH ALONG OWEN DRIVE AND TERMINATING IN 06-0054. THE CONTRACTOR SHALL BACK PULL THIS CABLE FOR TERMINATION IN NEW BASE MOUNTED SPLICE CABINET No.4 (SPC-4).

GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC. PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

- | | |
|--|---|
| <ul style="list-style-type: none"> 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE 2 INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE 3 INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE 4 INSTALL SMFO CABLE 5 INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (PcE) 6 INSTALL FIBER OPTIC DROP CABLE 7 INSTALL TRACER WIRE 8 TRENCH 9 INSTALL PVC CONDUIT 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD 12A INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL 12B INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE. 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT 14 INSTALL POLYETHYLENE CONDUIT 15 DIRECTIONAL DRILL CONDUIT 16 BORE AND JACK CONDUIT 17 INSTALL CABLE(S) IN EXISTING CONDUIT 18 INSTALL CABLE(S) IN NEW CONDUIT 19 INSTALL CABLE(S) IN EXISTING RISER 20 INSTALL CABLE(S) IN NEW RISER 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE) 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE) 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET 27 INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPICE CABLE IN CABINET 29 INSTALL UNDERGROUND SPICE ENCLOSURE 30 INSTALL AERIAL SPICE ENCLOSURE 31 INSTALL POLE MOUNTED CABINET 32 INSTALL BASE MOUNTED SPICE CABINET (336) WITH EXTEND BASE 33 REMOVE EXISTING SPICE CABINET 34 INSTALL CABINET FOUNDATION 35 REMOVE EXISTING CABINET FOUNDATION 36 INSTALL CCTV CAMERA ASSEMBLY 37 INSTALL CCTV CAMERA WOOD POLE 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION 39 INSTALL JUNCTION BOX 40 INSTALL OVERSIZED JUNCTION BOX 41 REMOVE EXISTING JUNCTION BOX 42 INSTALL WOOD POLE 43 REMOVE EXISTING WOOD POLE 44 INSTALL AERIAL GUY ASSEMBLY 45 INSTALL STANDARD GUY ASSEMBLY 46 INSTALL SIDEWALK GUY ASSEMBLY 47 INSTALL MESSENGER CABLE 48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE 49 REMOVE EXISTING COMMUNICATIONS CABLE 50 INSTALL ETHERNET SWITCH 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE 52 INSTALL DELINEATOR MARKER 53 STORE 50 FEET OF COMMUNICATIONS CABLE 54 LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE 56 LASH CABLE(S) TO NEW MESSENGER CABLE 57 MODIFY EXISTING ELECTRICAL SERVICE 58 INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV 59 INSTALL NEW BASE MOUNTED CABINET (336) 60 SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDBLE DUCT SEAL 61 ROUTE CABLE(S) INSIDE METAL POLE AND OUT TO SIGNAL CABINET. USE EXISTING JUNCTION BOXES AND CONDUIT SYSTEMS WHEN AVAILABLE. ENSURE FIBER CABLES DO NOT SHARE JUNCTION BOXES AND CONDUIT SYSTEMS WITH SIGNAL CABLES OR OTHER 120 VOLT CURRENT CARRYING CONDUCTORS. 62 INSTALL TEMPORARY DROP CABLE MAINTENANCE LOOP WITH CABLE BRACKET | <ul style="list-style-type: none"> SPC NEW SPLICE CABINET, BASE MOUNTED EXISTING CCTV CABINET FO NEW FIBER OPTIC COMMUNICATIONS CABLE REM EXISTING COMMUNICATIONS CABLE TO BE REMOVED OR RELOCATED PP EXISTING POWER PEDESTAL 174 UTILITY POLE TAG NUMBER JU JOINT USE POLE MP METAL POLE |
|--|---|

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

PHASE III FIBER TRUNK CABLE INSTALLATION

Prepared for the Offices of:

750 N. Greenfield Plaza, Garner, NC 27529

**US 401 BUSINESS (RAEFORD ROAD)
SIGNAL SYSTEM AND
COMMUNICATIONS CABLE /
CONDUIT ROUTING PLANS**

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

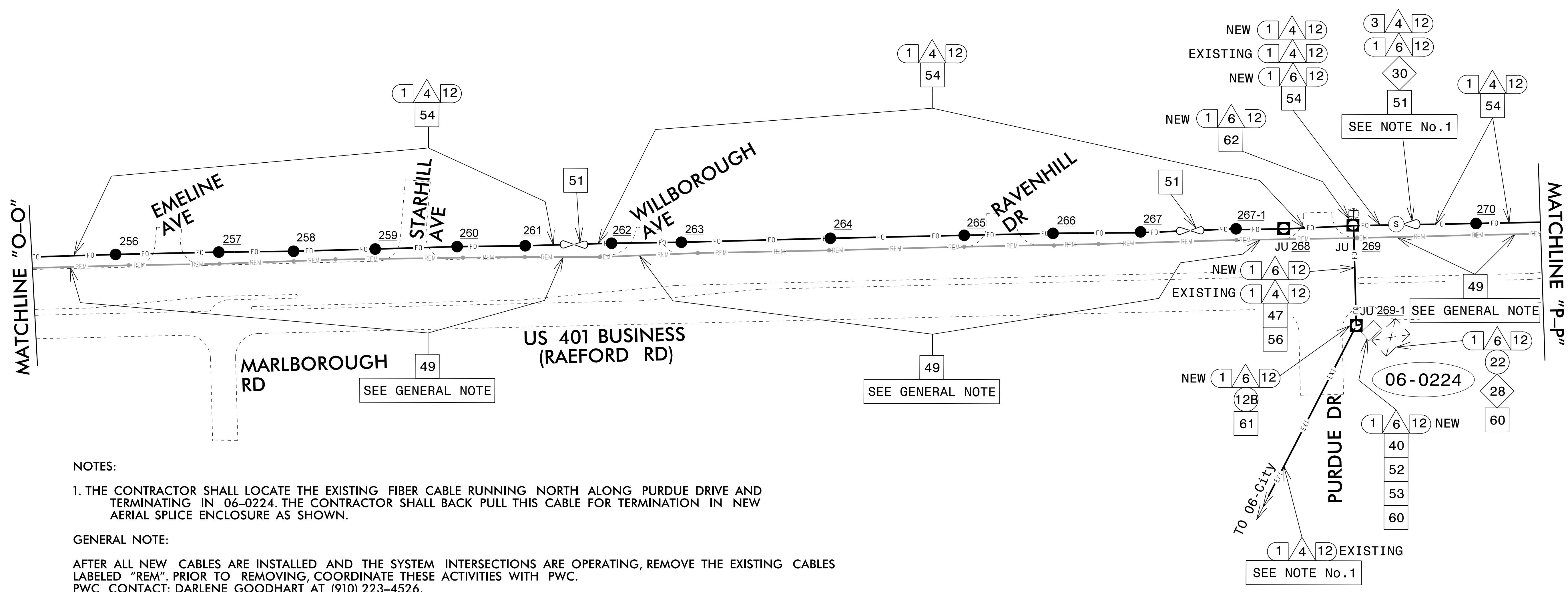
SCALE: NTS

SEAL

Lawrence E. Overmire
Professional Engineer
No. 045933
State of North Carolina

DocuSigned by:
Lawrence E. Overmire 3/29/2018

3/27/2018 U:\171001766\transportation\design\tr\off\c\5\signal\des\ign\its U-4405\SCP Cable Routing.dgn F:\les*260_85_U-4405_SCP_17_180329.dgn j.ingram



NOTES:

1. THE CONTRACTOR SHALL LOCATE THE EXISTING FIBER CABLE RUNNING NORTH ALONG PURDUE DRIVE AND TERMINATING IN 06-0224. THE CONTRACTOR SHALL BACK PULL THIS CABLE FOR TERMINATION IN NEW AERIAL SPICE ENCLOSURE AS SHOWN.

GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC. PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

1	INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	15	DIRECTIONAL DRILL CONDUIT	30	INSTALL AERIAL SPICE ENCLOSURE	46	INSTALL SIDEWALK GUY ASSEMBLY
2	INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	16	BORE AND JACK CONDUIT	31	INSTALL POLE MOUNTED CABINET	47	INSTALL MESSENGER CABLE
3	INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	32	INSTALL BASE MOUNTED SPICE CABINET (336) WITH EXTEND BASE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE
4	INSTALL SMFO CABLE	18	INSTALL CABLE(S) IN NEW CONDUIT	33	REMOVE EXISTING SPICE CABINET	49	REMOVE EXISTING COMMUNICATIONS CABLE
5	INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (PoE)	19	INSTALL CABLE(S) IN EXISTING RISER	34	INSTALL CABINET FOUNDATION	50	INSTALL ETHERNET SWITCH
6	INSTALL FIBER OPTIC DROP CABLE	20	INSTALL CABLE(S) IN NEW RISER	35	REMOVE EXISTING CABINET FOUNDATION	51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
7	INSTALL TRACER WIRE	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS	36	INSTALL CCTV CAMERA ASSEMBLY	52	INSTALL DELINEATOR MARKER
8	TRENCH	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	37	INSTALL CCTV CAMERA WOOD POLE	53	STORE 50 FEET OF COMMUNICATIONS CABLE
9	INSTALL PVC CONDUIT	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	54	LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	39	INSTALL JUNCTION BOX	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE
11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	40	INSTALL OVERSIZED JUNCTION BOX	56	LASH CABLE(S) TO NEW MESSENGER CABLE
12A	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	26	TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	41	REMOVE EXISTING JUNCTION BOX	57	MODIFY EXISTING ELECTRICAL SERVICE
12B	INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE.	27	INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	42	INSTALL WOOD POLE	58	INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV
13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPICE CABLE IN CABINET	43	REMOVE EXISTING WOOD POLE	59	INSTALL NEW BASE MOUNTED CABINET (336)
14	INSTALL POLYETHYLENE CONDUIT	29	INSTALL UNDERGROUND SPICE ENCLOSURE	44	INSTALL AERIAL GUY ASSEMBLY	60	SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL
				45	INSTALL STANDARD GUY ASSEMBLY		

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

PHASE III FIBER TRUNK CABLE INSTALLATION

Prepared for the Offices of:

750 N. Greenfield Plaza, Garner, NC 27529

US 401 BUSINESS (RAEFORD ROAD) SIGNAL SYSTEM AND COMMUNICATIONS CABLE / CONDUIT ROUTING PLANS

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

SEAL

Lawrence E. Overton
Professional Engineer
SEAL 045933
DATE

REVISIONS	INIT.	DATE

SCALE

NTS

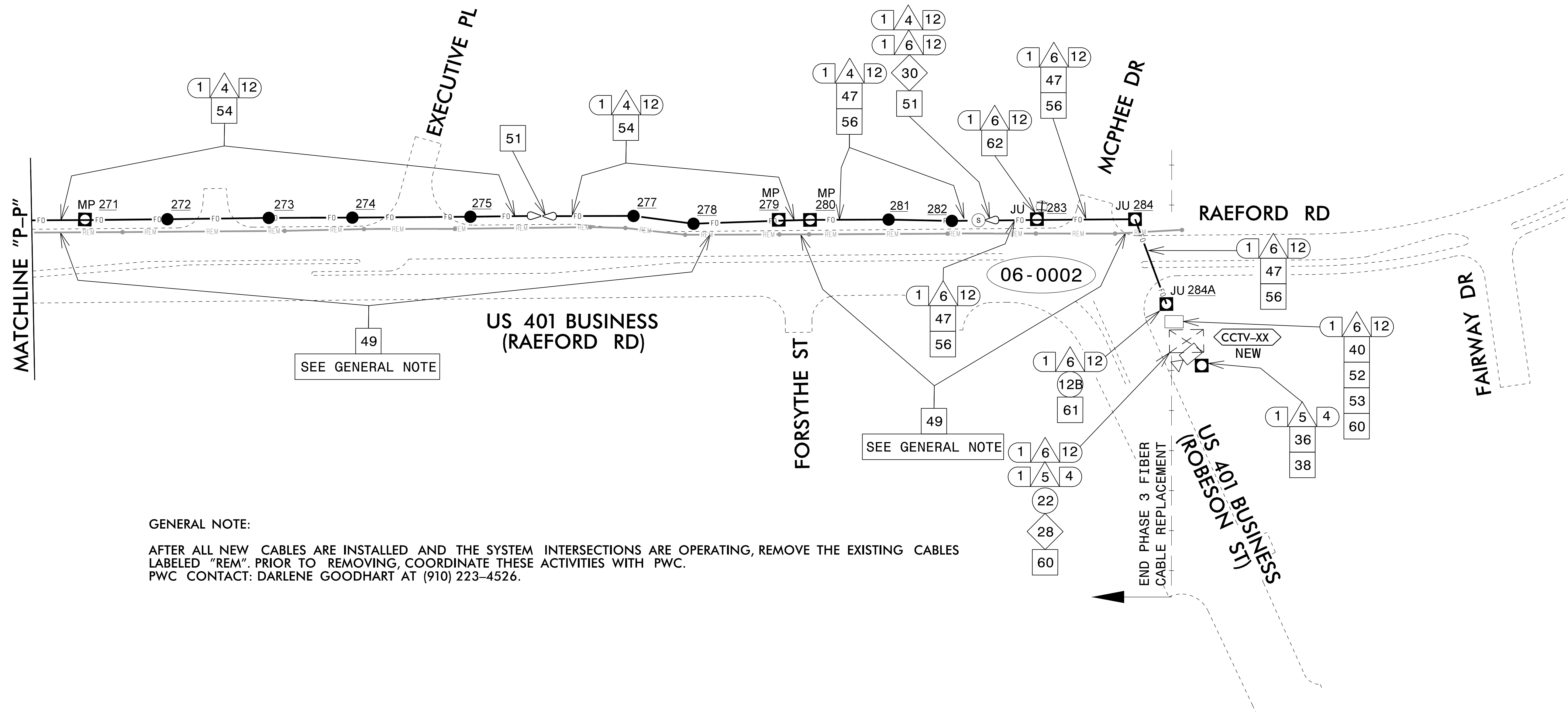
North Arrow

DocuSigned by:
Lawrence E. Overton 3/29/2018

DATE

CADD FILE NAME

3/27/2018
 U:*171001766*tr\transportation\des\ign*Tr\off\c\45\ign\des\ign*ITS U-4405*SCP Cable Routing.dgn
 j.ingram



GENERAL NOTE:

AFTER ALL NEW CABLES ARE INSTALLED AND THE SYSTEM INTERSECTIONS ARE OPERATING, REMOVE THE EXISTING CABLES LABELED "REM". PRIOR TO REMOVING, COORDINATE THESE ACTIVITIES WITH PWC. PWC CONTACT: DARLENE GOODHART AT (910) 223-4526.

1. INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	15. DIRECTIONAL DRILL CONDUIT	30. INSTALL AERIAL SPLICE ENCLOSURE	46. INSTALL SIDEWALK GUY ASSEMBLY
2. INSTALL REA, PE - 38, (FIGURE - 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE	16. BORE AND JACK CONDUIT	31. INSTALL POLE MOUNTED CABINET	47. INSTALL MESSENGER CABLE
3. INSTALL 3-CONDUCTOR, CLASS B, STRANDED UNDERGROUND POWER CABLE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	32. INSTALL BASE MOUNTED SPLICE CABINET (336) WITH EXTEND BASE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE
4. INSTALL SMFO CABLE	18. INSTALL CABLE(S) IN NEW CONDUIT	33. REMOVE EXISTING SPLICE CABINET	49. REMOVE EXISTING COMMUNICATIONS CABLE
5. INSTALL WEATHERPROOF CATEGORY 5e UTP - 4 PAIR 23 AWG CABLE (Pc)	19. INSTALL CABLE(S) IN EXISTING RISER	34. INSTALL CABINET FOUNDATION	50. INSTALL ETHERNET SWITCH
6. INSTALL FIBER OPTIC DROP CABLE	20. INSTALL CABLE(S) IN NEW RISER	35. REMOVE EXISTING CABINET FOUNDATION	51. INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
7. INSTALL TRACER WIRE	21. INSTALL CABLE(S) IN EXISTING CONDUIT STUBOUTS	36. INSTALL CCTV CAMERA ASSEMBLY	52. INSTALL DELINEATOR MARKER
8. TRENCH	22. INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	37. INSTALL CCTV CAMERA WOOD POLE	53. STORE 50 FEET OF COMMUNICATIONS CABLE
9. INSTALL PVC CONDUIT	23. INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)	38. INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	54. LASH CABLE(S) TO EXISTING PWC FIBER OPTIC LINE
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	24. INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET	39. INSTALL JUNCTION BOX	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE
11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	25. INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET	40. INSTALL OVERSIZED JUNCTION BOX	56. LASH CABLE(S) TO NEW MESSENGER CABLE
12A. INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL	26. TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	41. REMOVE EXISTING JUNCTION BOX	57. MODIFY EXISTING ELECTRICAL SERVICE
12B. INSTALL CABLES/DROP CABLE THROUGH NIPPLE ON METAL POLE (SIGNAL OR JOINT USE). INSTALL HEAT SHRINK TUBING OVER NIPPLE.	27. INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET	42. INSTALL WOOD POLE	58. INSTALL NEW ELECTRICAL SERVICE FOR DMS/CCTV
13. INSTALL OUTER-DUCT POLYETHYLENE CONDUIT	28. INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	43. REMOVE EXISTING WOOD POLE	59. INSTALL NEW BASE MOUNTED CABINET (336)
14. INSTALL POLYETHYLENE CONDUIT	29. INSTALL UNDERGROUND SPLICE ENCLOSURE	44. INSTALL AERIAL GUY ASSEMBLY	60. SEAL ALL CONDUIT ENTERING JUNCTION BOXES AND SIGNAL/CCTV/DMS CONTROL CABINETS WITH MOLDABLE DUCT SEAL

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

PHASE III FIBER TRUNK CABLE INSTALLATION

Prepared for the Offices of:

750 N. Greenfield Plaza, Garner, NC 27529

US 401 BUSINESS (RAEFORD ROAD) SIGNAL SYSTEM AND COMMUNICATIONS CABLE / CONDUIT ROUTING PLANS

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS

PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON

SEAL

Lawrence E. Overton #29/2018

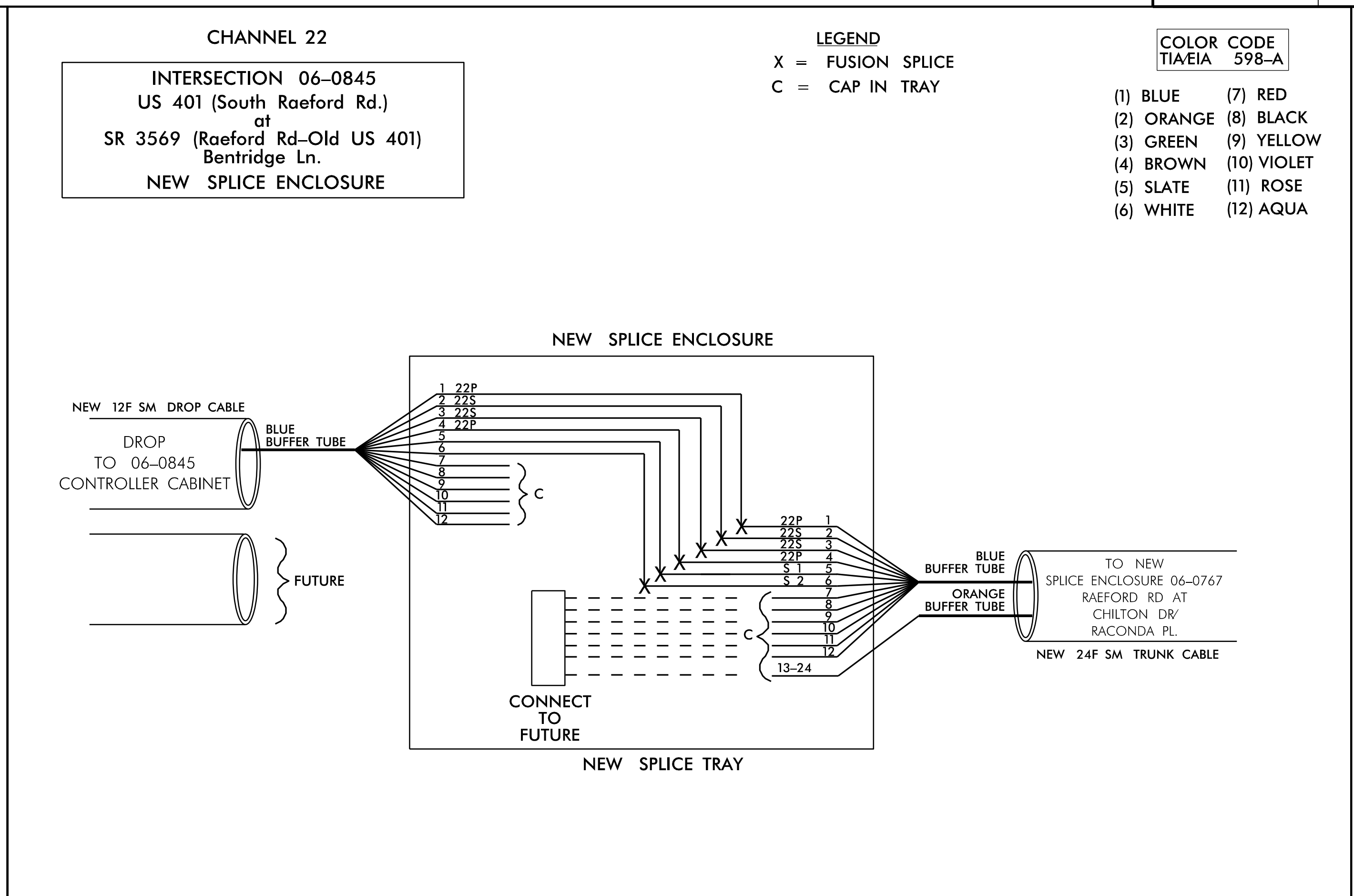
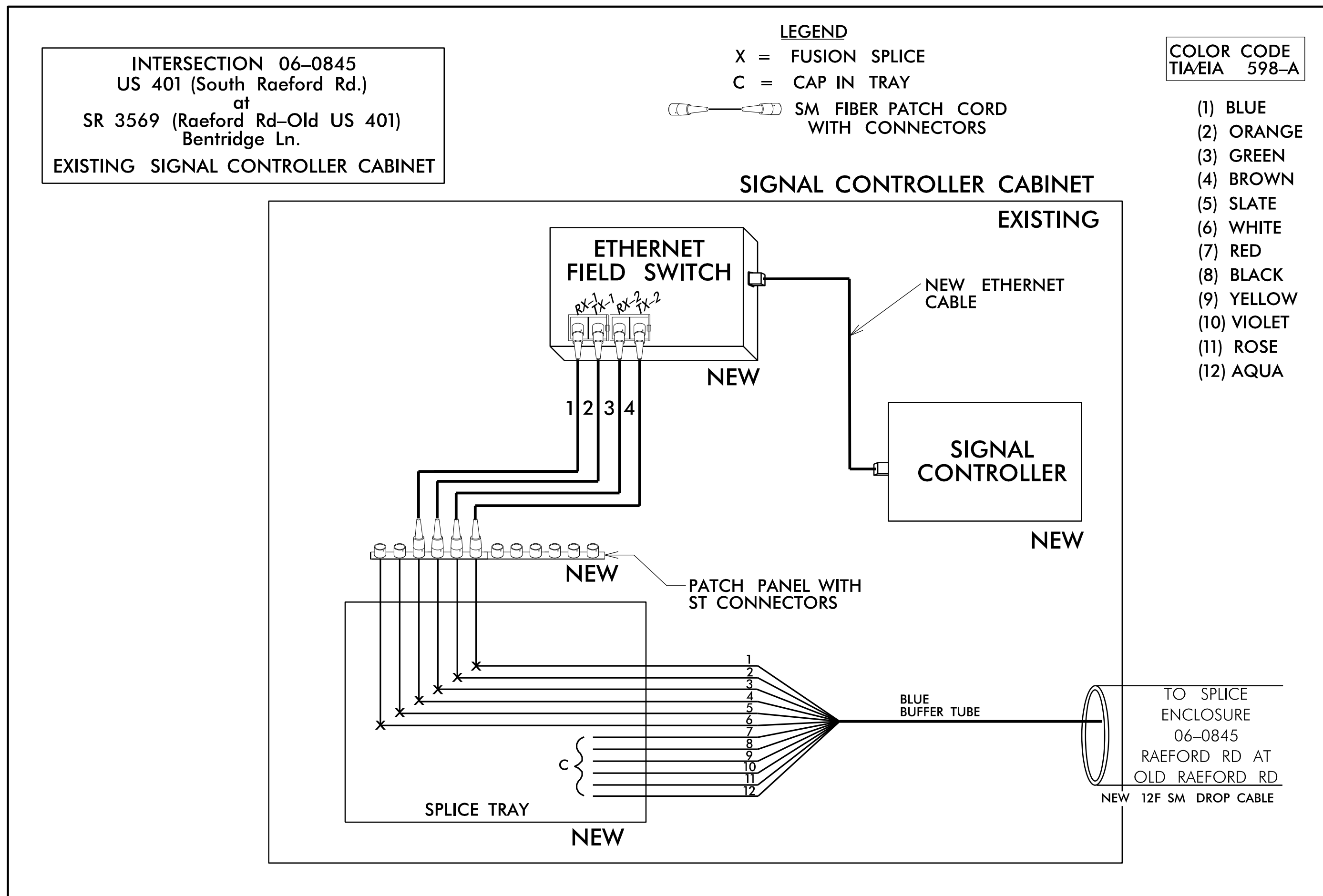
SCALE: NTS

REVISIONS	INIT.	DATE

DocuSigned by: *Lawrence E. Overton* #29/2018

CADD FILE NAME

3/27/2018 U:*171001766*tr\transportation\des\ign*tr\off\c\5\ign\des\ign*its U-4405*SCP Cable Routing.dgn U-4405*SCP Cable Routing.dgn 19-180329.dgn j.ingram



1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
- 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
- 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

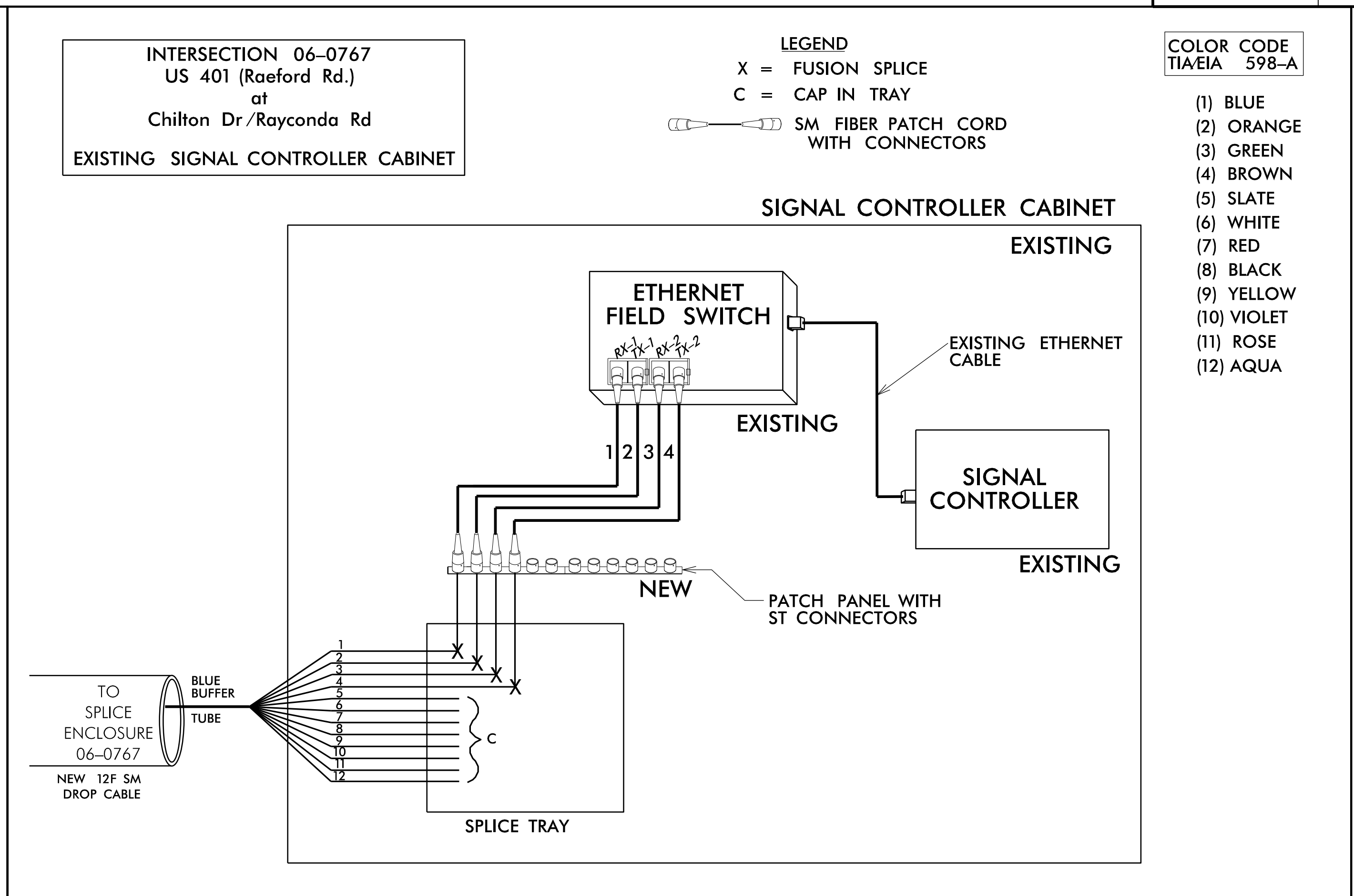
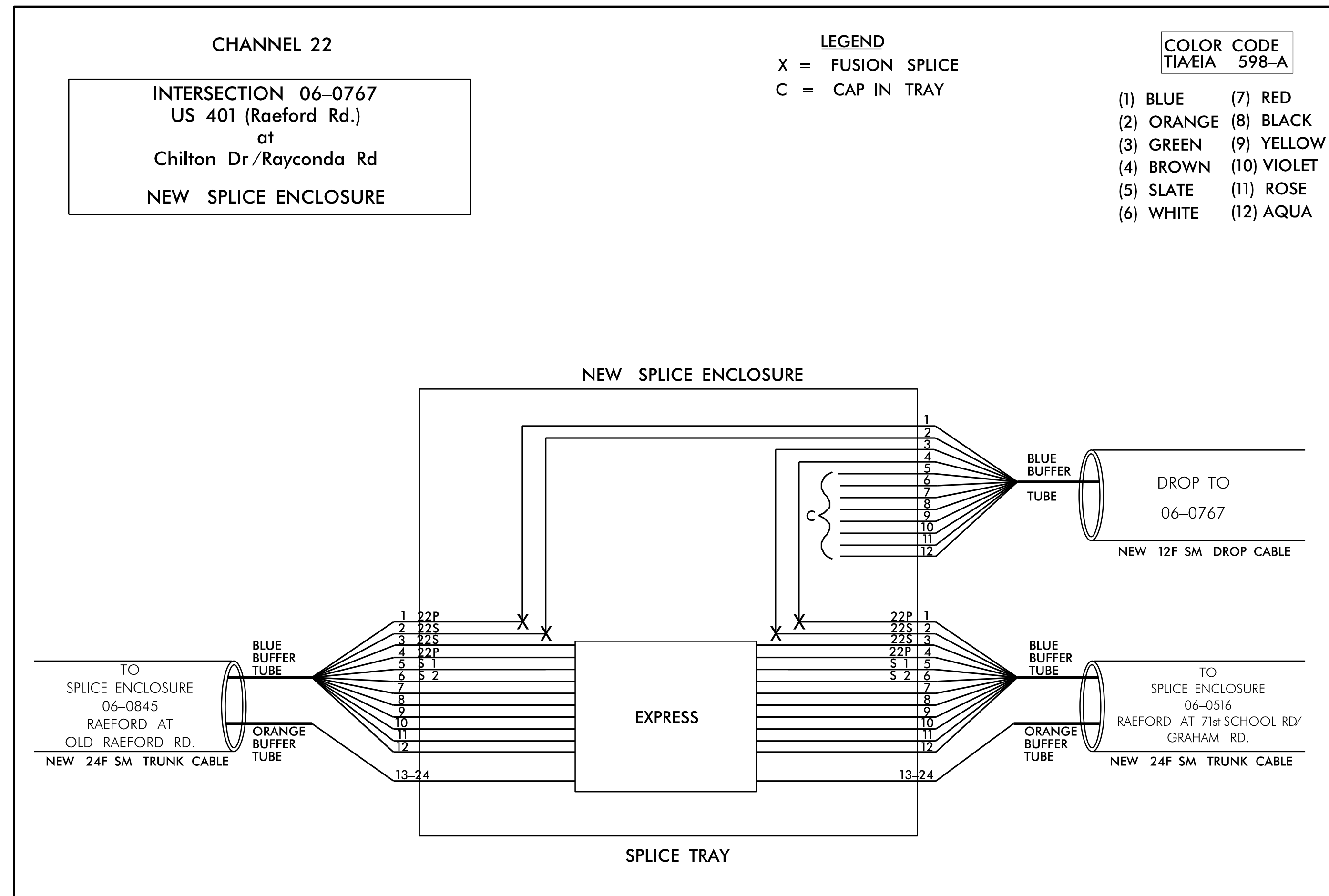
5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

US 401 (South Raeford Rd.) at
SR 3569 (Raeford Rd-Old US 401)
Bentridge Ln.

3/27/2018 U:\1710011766*Transportation*Traffic*Signal*Des*gn*ITS U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0845</p>							
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>	<p>SEAL LAWRENCE E. OWEN ENGINEER 045933</p>						
<p>PLAN DATE: MARCH 2018</p>	<p>REVIEWED BY: D. HARRIS</p>	<p>PREPARED BY: J. INGRAM</p>	<p>REVIEWED BY: B. WATSON</p>						
<p>SCALE N/A</p>	<p>REVISIONS</p> <table border="1"> <tr><th>NO.</th><th>DESCRIPTION</th><th>DATE</th></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	NO.	DESCRIPTION	DATE				<p>INIT. DATE</p>	<p>DATE</p>
NO.	DESCRIPTION	DATE							



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING

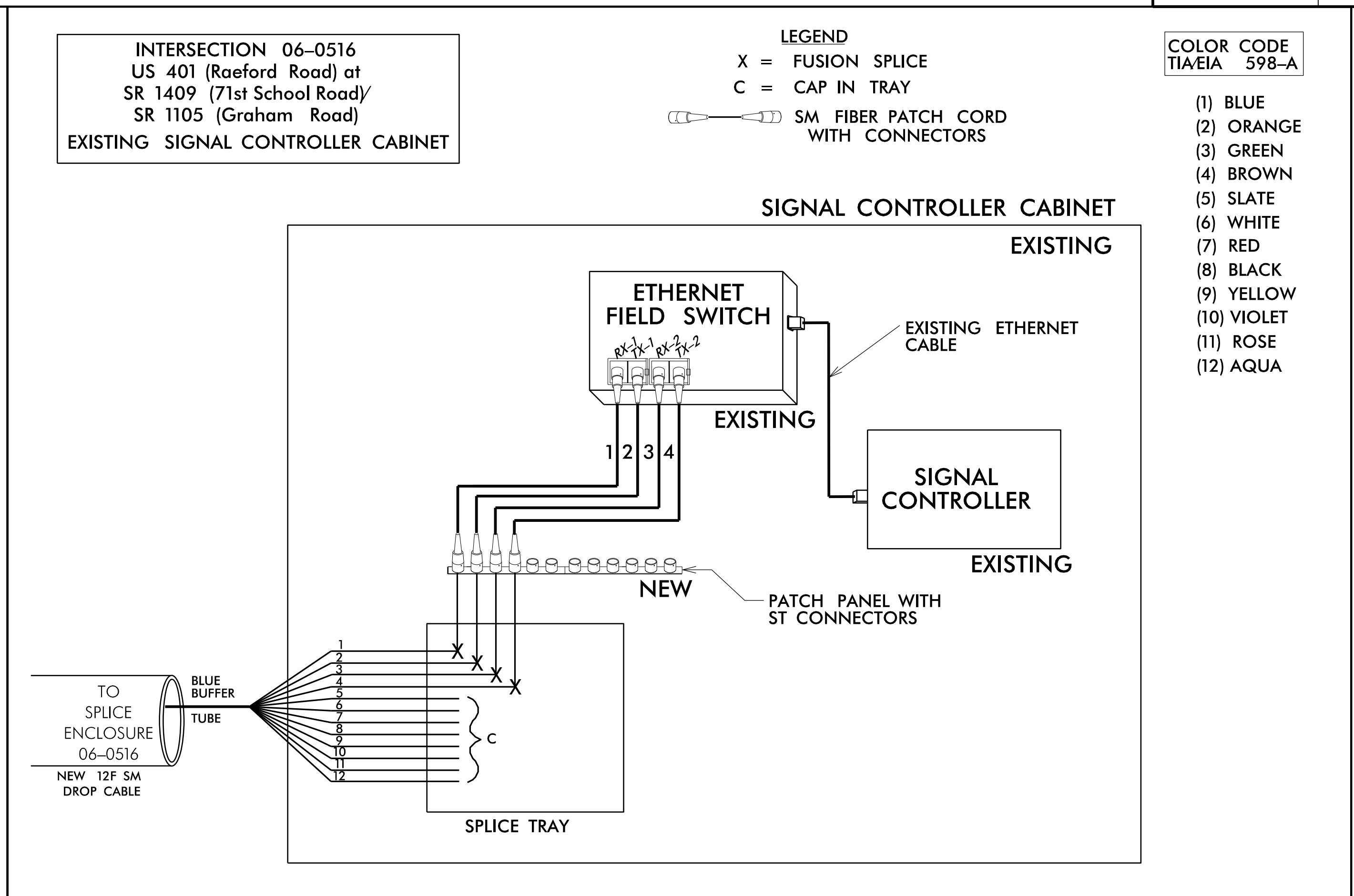
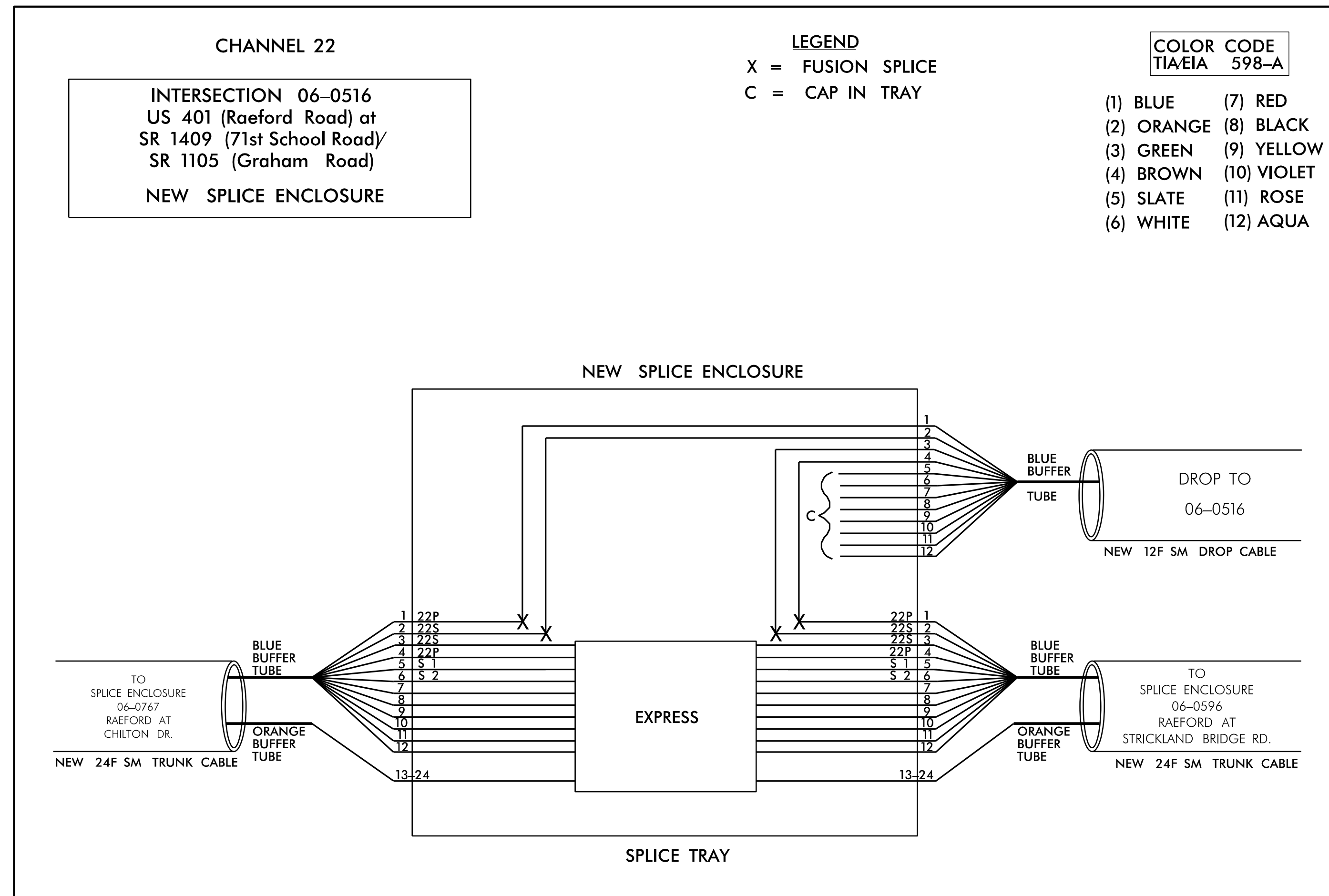
PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

US 401 (Raeford Rd.) at
Chilton Dr / Rayconda Rd

<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0767</p>		<p>SEAL STATE OF NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045933 LAWRENCE E. OVERTON</p>
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>	<p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p>	
<p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>		<p>REVISIONS</p>	<p>INIT. DATE</p>	<p>DocuSigned by: Lawrence E Overton 3/29/2018 DATE</p>
<p>SCALE: N/A</p>		<p>CADD Filename:</p>		

3/27/2018
 U:\171001766*Transportation*Traffic*Signal*Design*ITS U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn
 j.ingram



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING

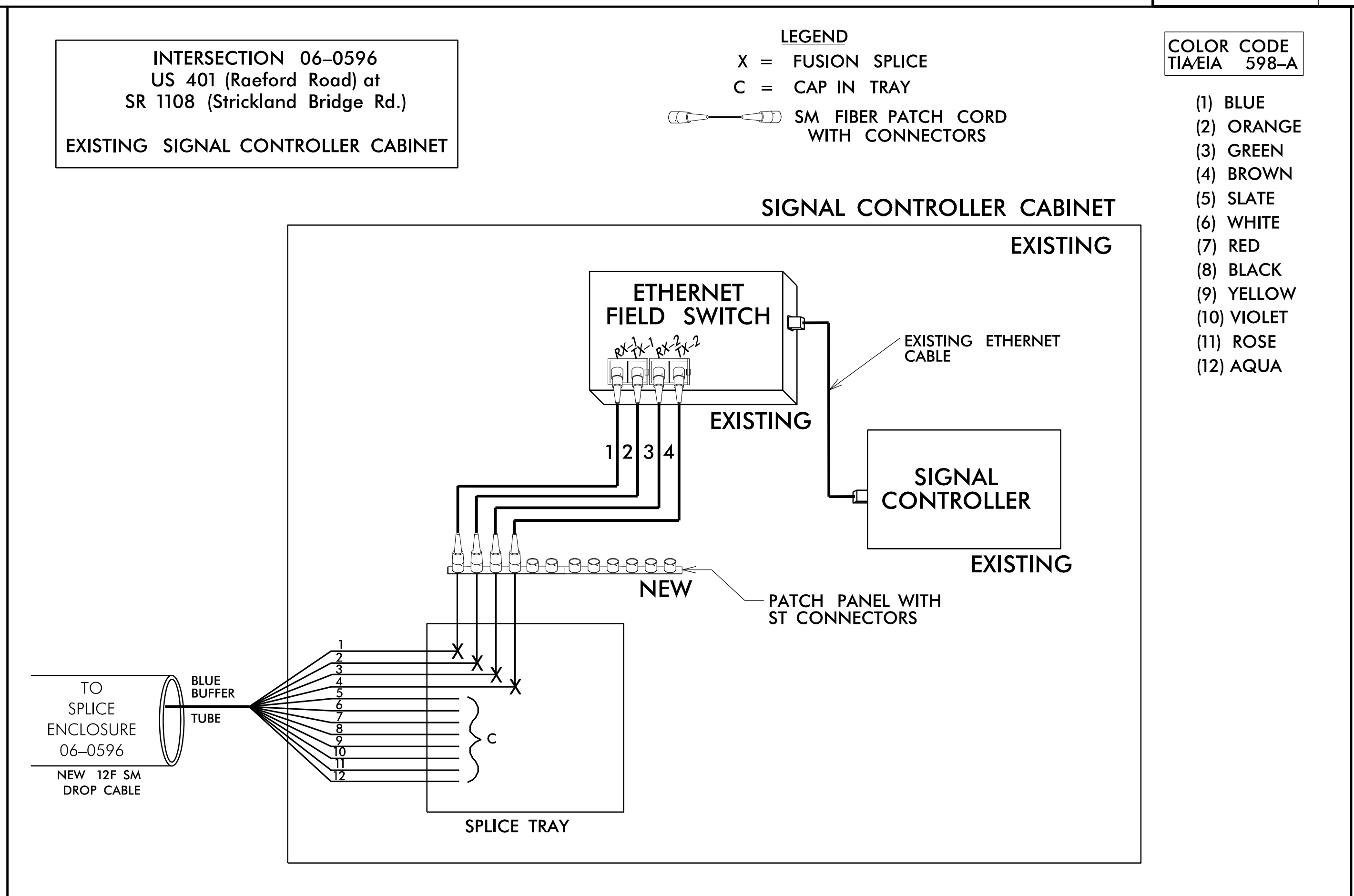
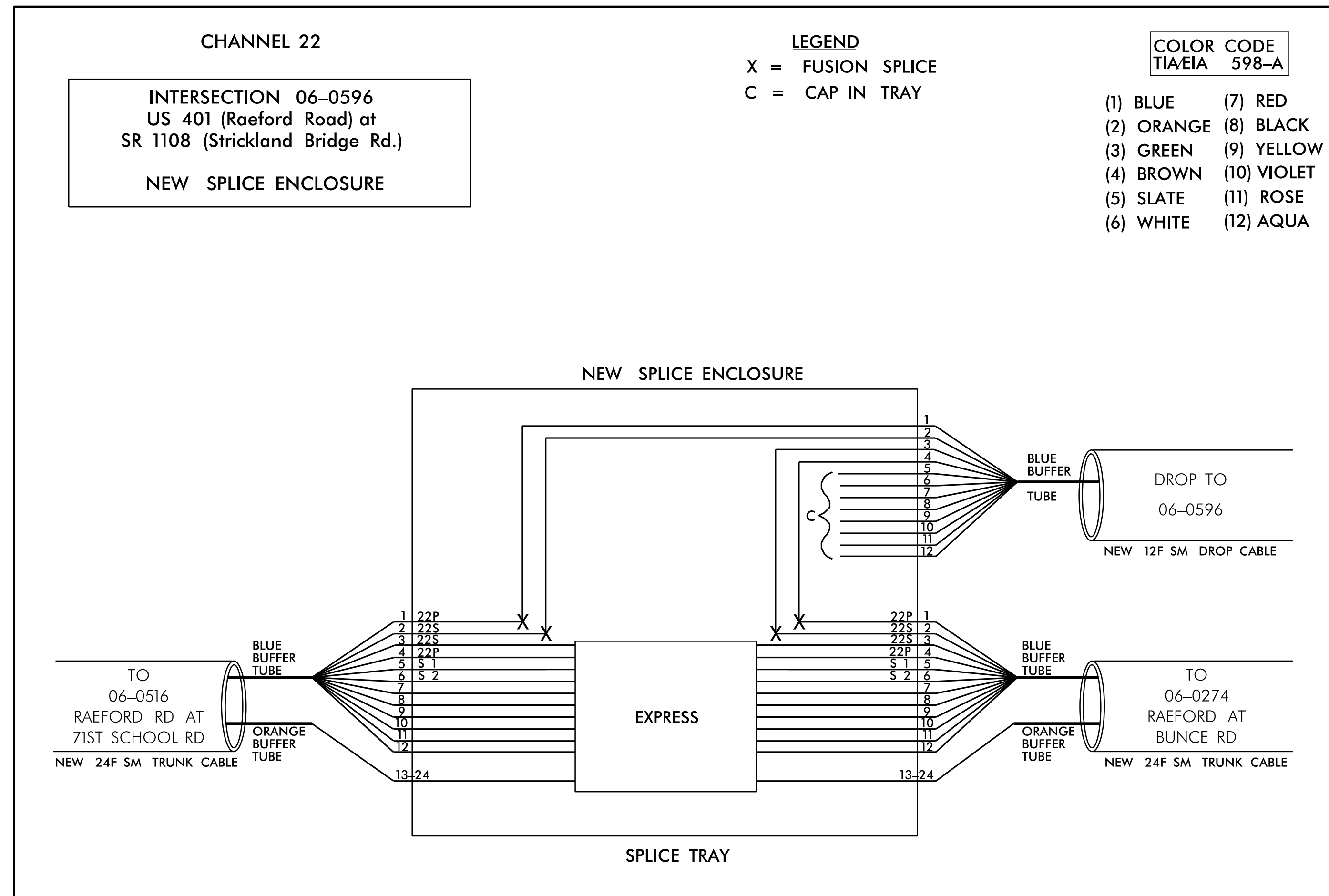
PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

US 401 (Raeford Road) at SR 1409 (71st School Road)/
SR 1105 (Graham Road)

<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0516</p>		<p>SEAL</p> <p>DocuSigned by: Lawrence E Owen 3/29/2018 DATE</p>										
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>			<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	INIT.	DATE						
REVISIONS	INIT.	DATE												

3/27/2018 U:\71001766*Transportation*Traffic*Signal*Des*gn*ITS U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn j.ingram



1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
- 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
- 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

- REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

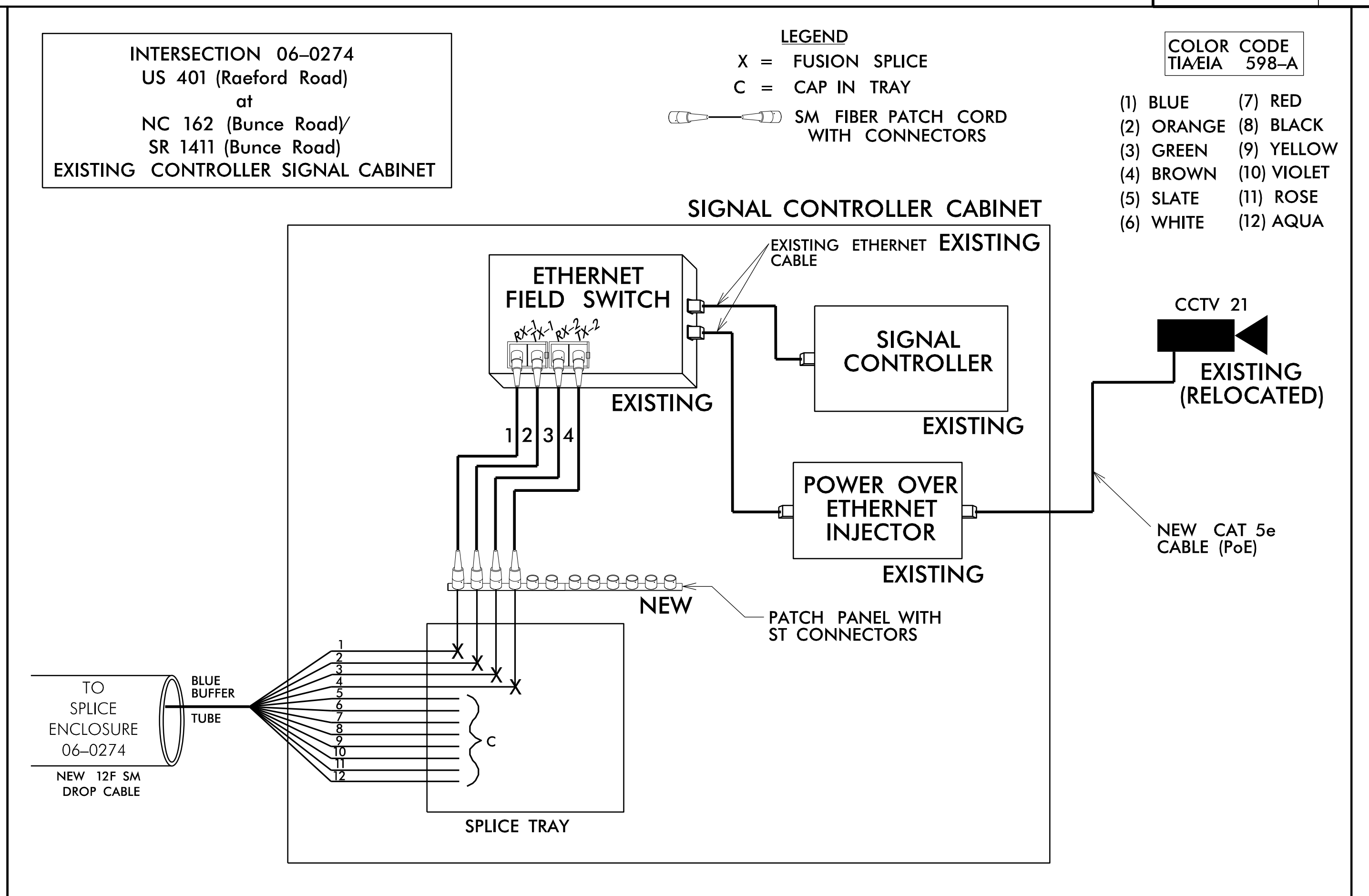
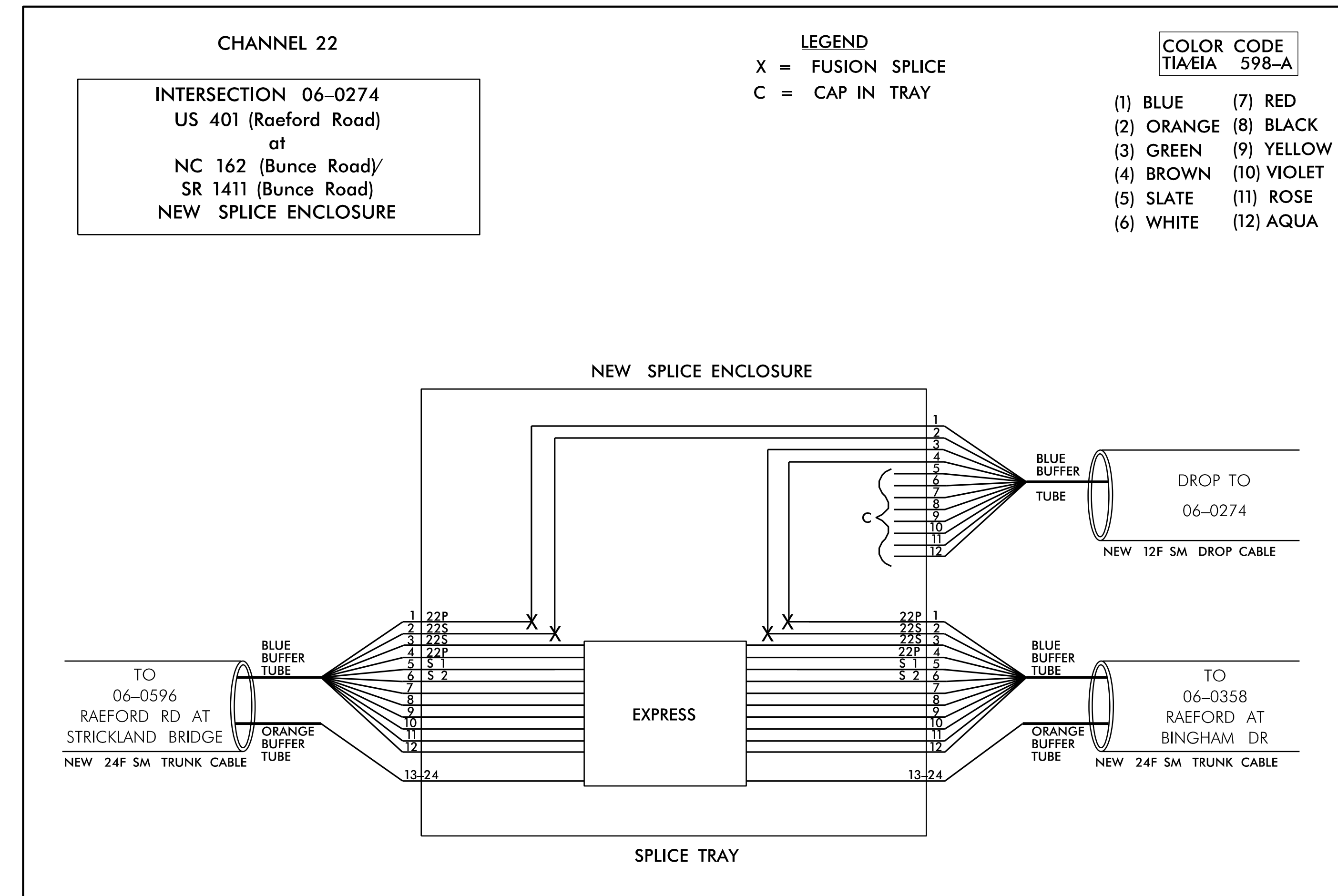
FINAL

US 401 (Raeford Road) at
SR 1108 (Strickland Bridge Rd.)

3/27/2018 U:\71001766*Transportation\on*des\gn*Traffic*Signal*Des\gn*ITS U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0596</p>		<p>SEAL</p>						
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE			
REVISIONS	INIT.	DATE								

DocuSigned by: Lawrence E Owen 3/29/2018
CADD Filename:



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING

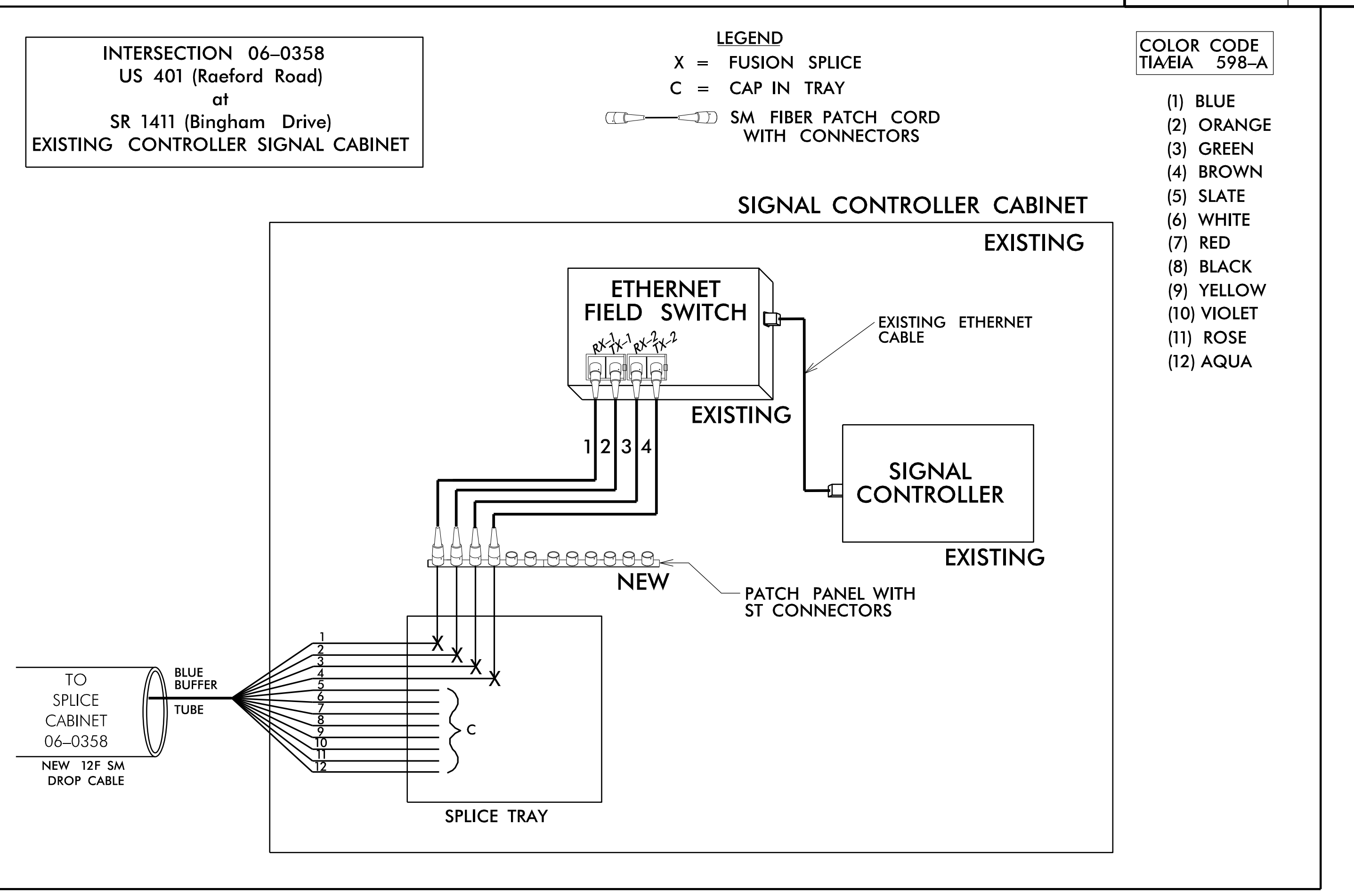
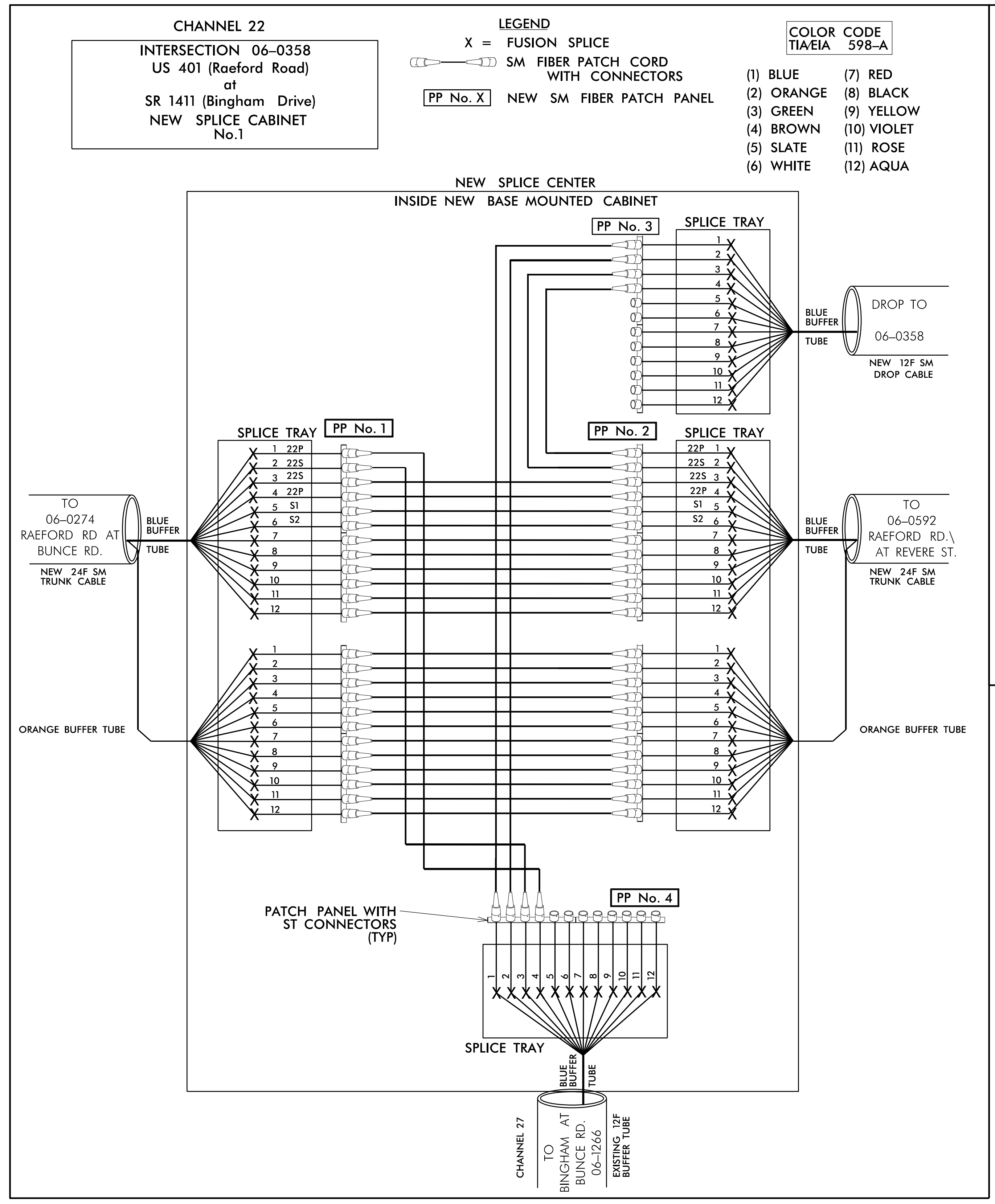
PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

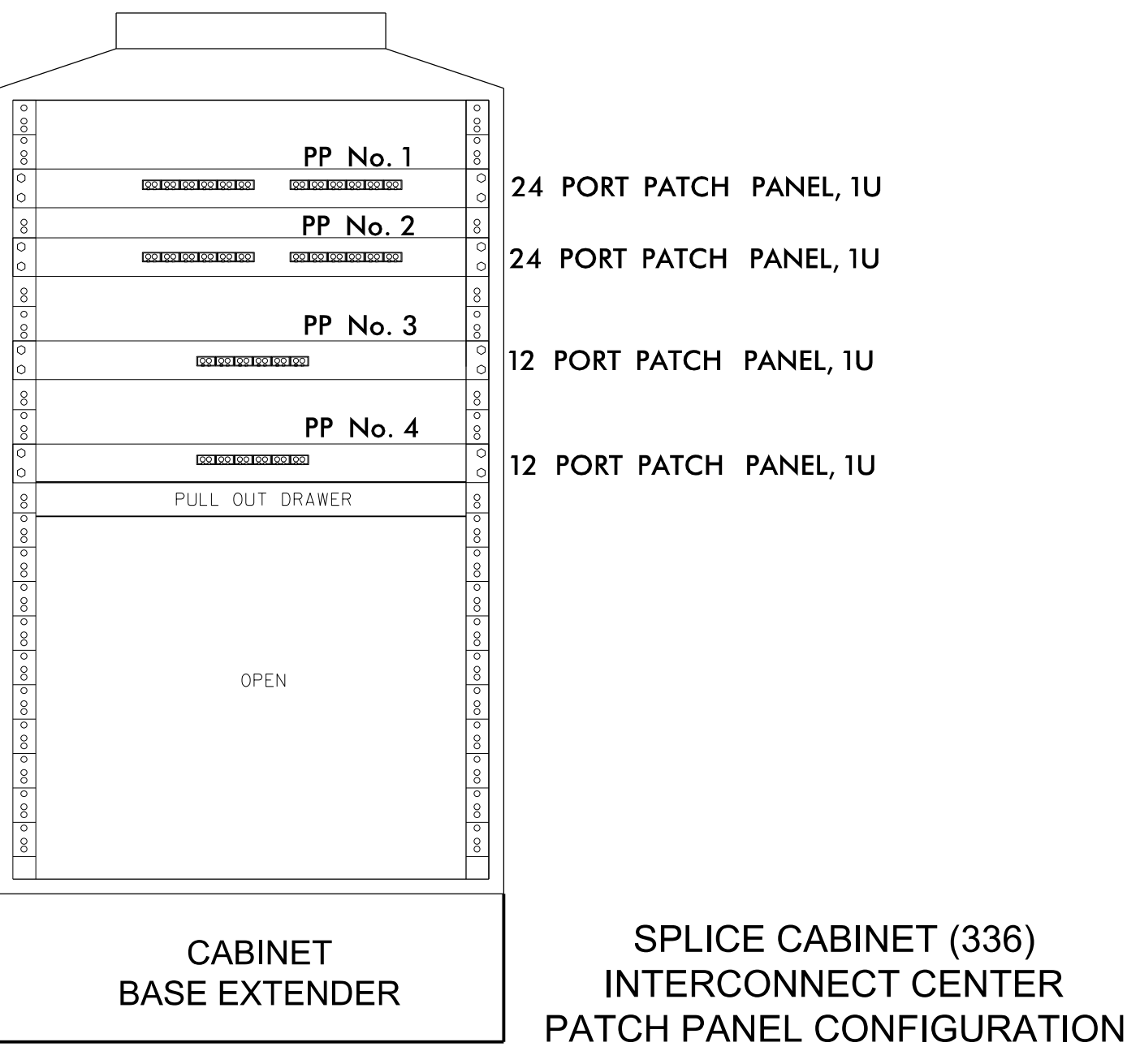
US 401 (Raeford Road)
at
NC 162 (Bunce Road)/
SR 1411 (Bunce Road)

3/27/2018 U:\171001766*Transportation\on*des\gn*Traff\ic*gn*ITS U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0274</p>	
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>SCALE: N/A</p>



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPICE TRAY THE FOLLOWING:
- REFERENCE SECTION 1731 "FIBER OPTIC SPICE ENCLOSURE"
- SPICE LOCATION
 - DATE
 - COMPANY NAME
 - NAME OF INDIVIDUAL PERFORMING THE SPICING
- PRIOR TO INSTALLING THE COVER ON THE SPICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.



FINAL US 401 (Raeford Road) at SR 1141 (Bingham Drive)

3/27/2018 U:\171001766*Transportation\Desi\gn\Traffic\Signal\Desi\gn\ITS U-4405*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j Ingram

Stantec
 Stantec Consulting Services Inc.
 801 Jones Franklin Road
 Suite 300
 Raleigh, NC 27606
 Tel. (919) 851-6866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

Prepared for the Offices of:

750 N. Greenfield Place, Garner, NC 27529

SCALE: N/A

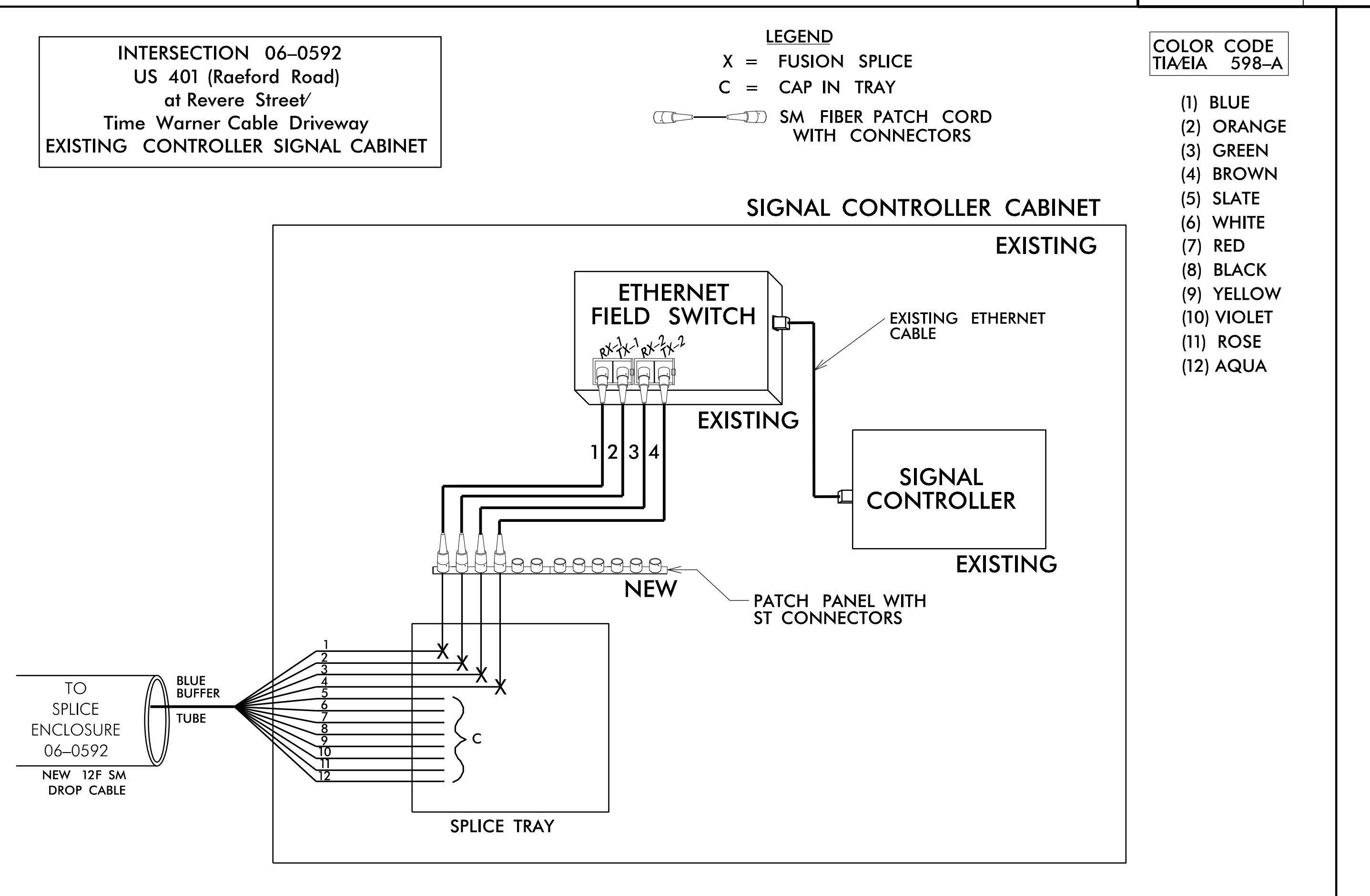
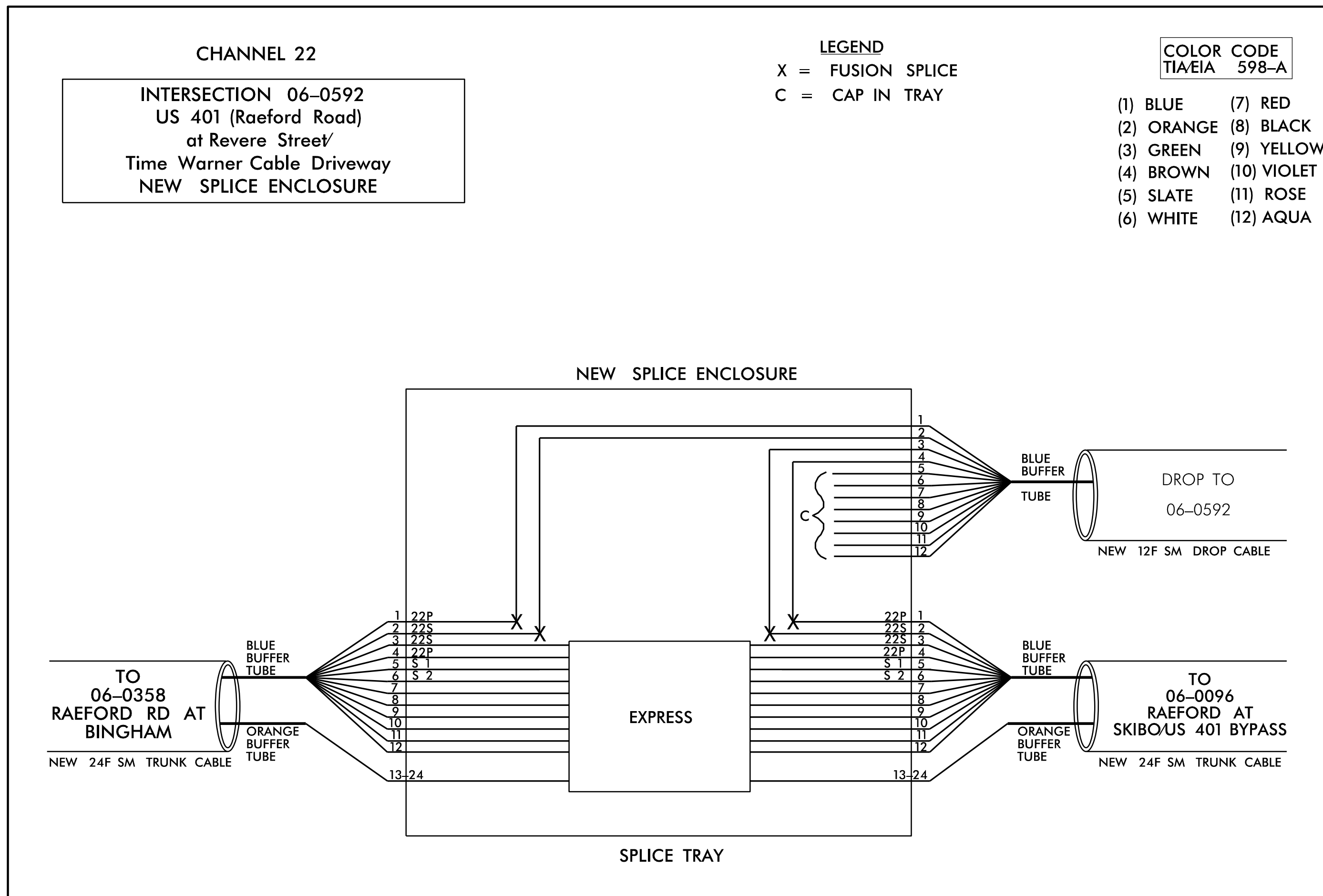
FIBER CABLE SPlicing DETAILS
INTERSECTION 06-0358

DIVISION 06 CUMBERLAND CO. FAYETTEVILLE

PLAN DATE: MARCH 2018	REVIEWED BY: D. HARRIS
PREPARED BY: J. INGRAM	REVIEWED BY: B. WATSON

REVISIONS	INIT.	DATE

DocuSigned by:
Lawrence E. Overman 3/29/2018
 DATE
 CADD Filename:



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPlice TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPlice ENCLOSURE"

 - 1.) SPlice LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPlicing

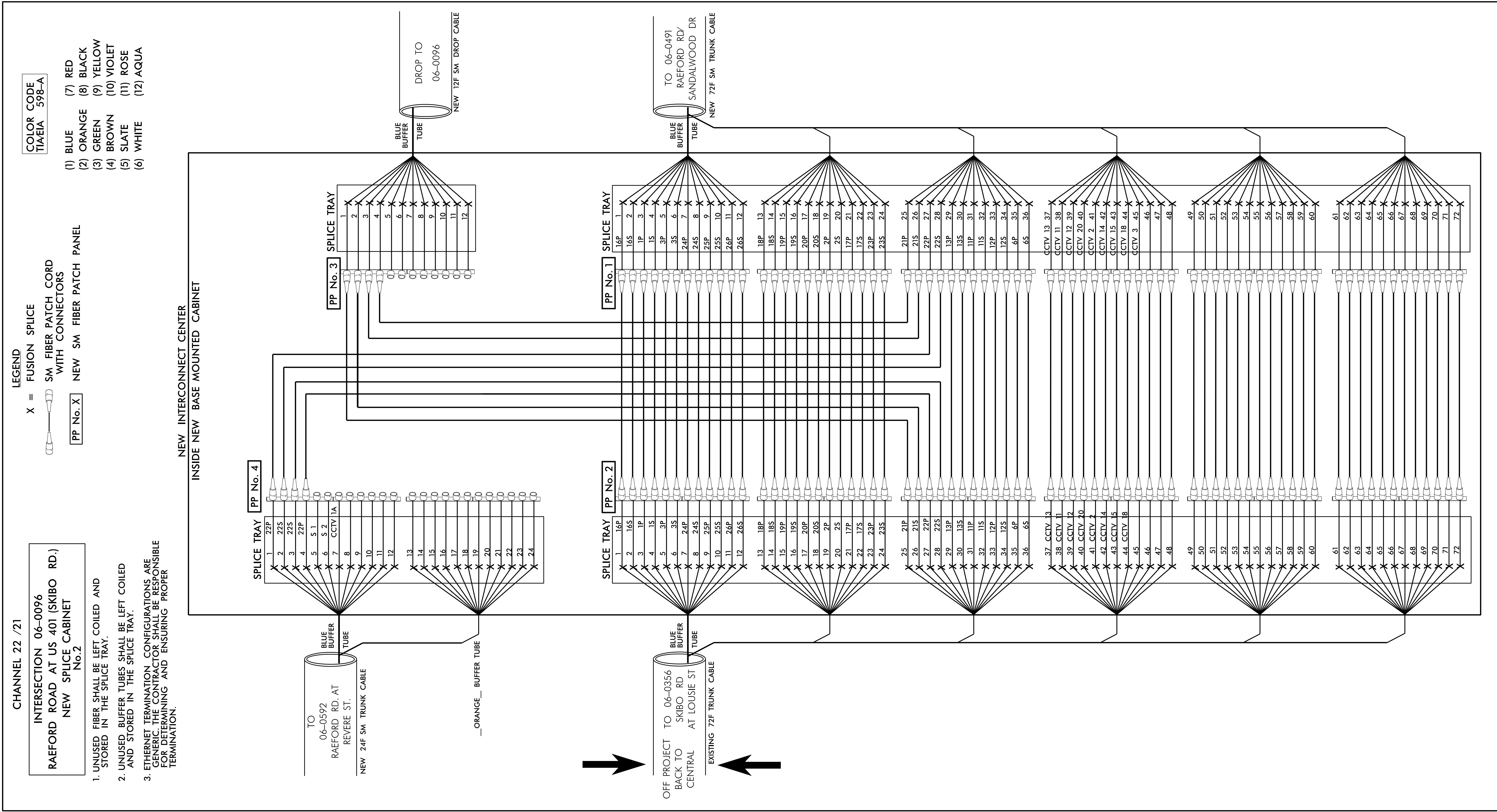
PRIOR TO INSTALLING THE COVER ON THE SPlice TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPlice TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPlice TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPlice TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

US 401 (Raeford Road)
at Revere Street/
Time Warner Cable Driveway

3/27/2018 U:\171001766*Transportation\Traffic\Signal\des\gn\its U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>FIBER CABLE SPlicing DETAILS INTERSECTION 06-0592</p>		<p>SEAL</p> <p>DocuSigned by: Lawrence E Owen 3/29/2018 DATE</p>							
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>SCALE: N/A</p>		<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	INIT.	DATE		
NO.	DESCRIPTION	INIT.	DATE								



CHANNEL 22 /21
 INTERSECTION 06-0096
 RAEFORD ROAD AT US 401 (SKIBO RD.)
 NEW SPLICE CABINET
 No.2

LEGEND
 X = FUSION SPICE
 SM FIBER PATCH CORD WITH CONNECTORS
 NEW SM FIBER PATCH PANEL
 PP No. X

COLOR CODE
 TIA/EIA 598-A
 (1) BLUE (7) RED
 (2) ORANGE (8) BLACK
 (3) GREEN (9) YELLOW
 (4) BROWN (10) VIOLET
 (5) SLATE (11) ROSE
 (6) WHITE (12) AQUA

1. UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
 2. UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
 3. ETHERNET TERMINATION CONFIGURATIONS ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND ENSURING PROPER TERMINATION.

SEE SCP 28 SPLICE CABINET FOR INTERCONNECT CENTER LAY OUT

- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING: REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

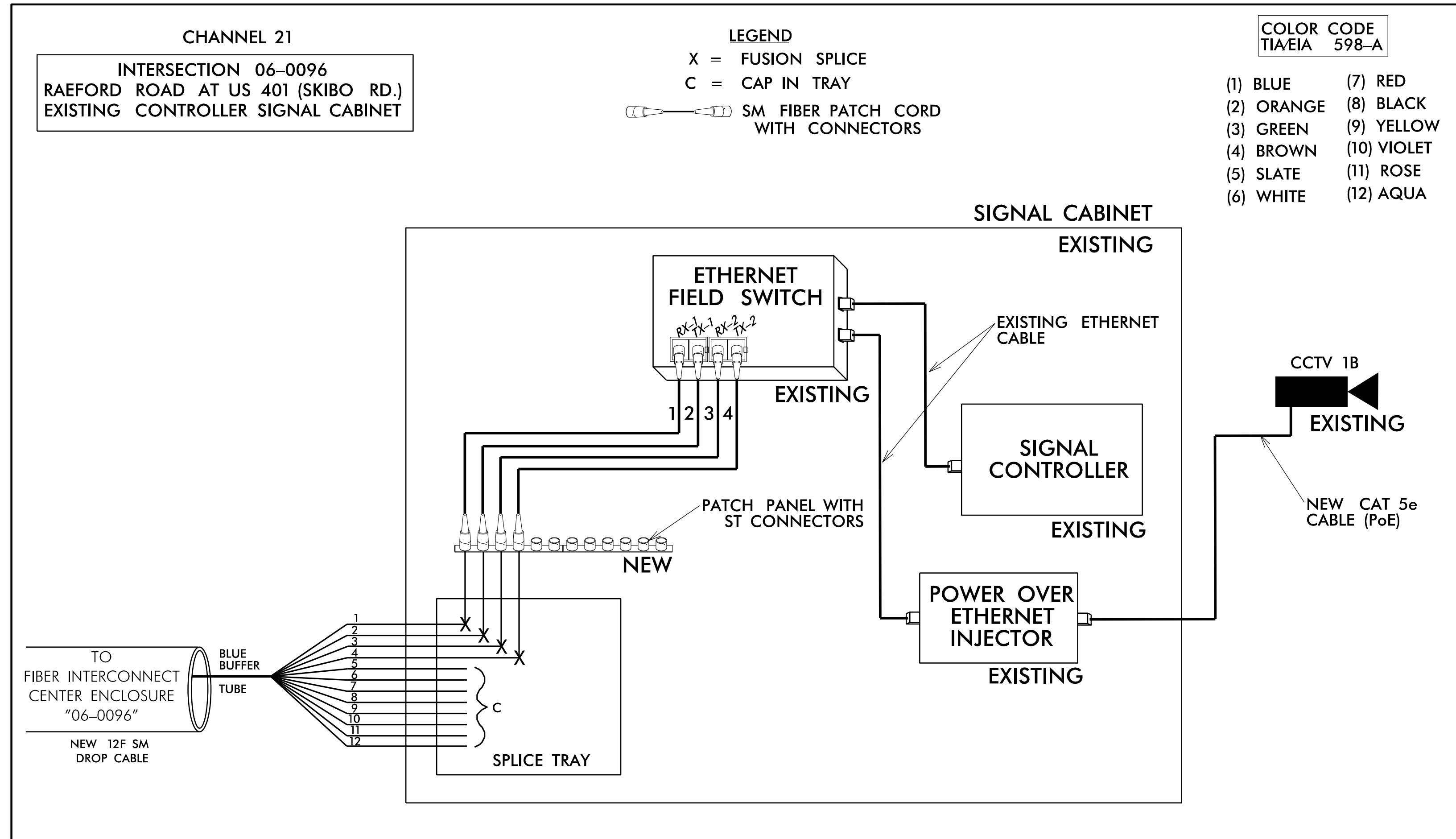
FINAL

RAEFORD RD AT US 401 (SKIBO RD.)

3/27/2018
 U:\171001766*Transportation\Information\des\gn*Traffic*Signal\des\gn*ITS U-4405*U-4405 Splice Details*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn
 j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0096</p>	
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	
SCALE	N/A	REVISIONS	INIT. DATE

CADD Filename: _____



1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
- 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
- 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

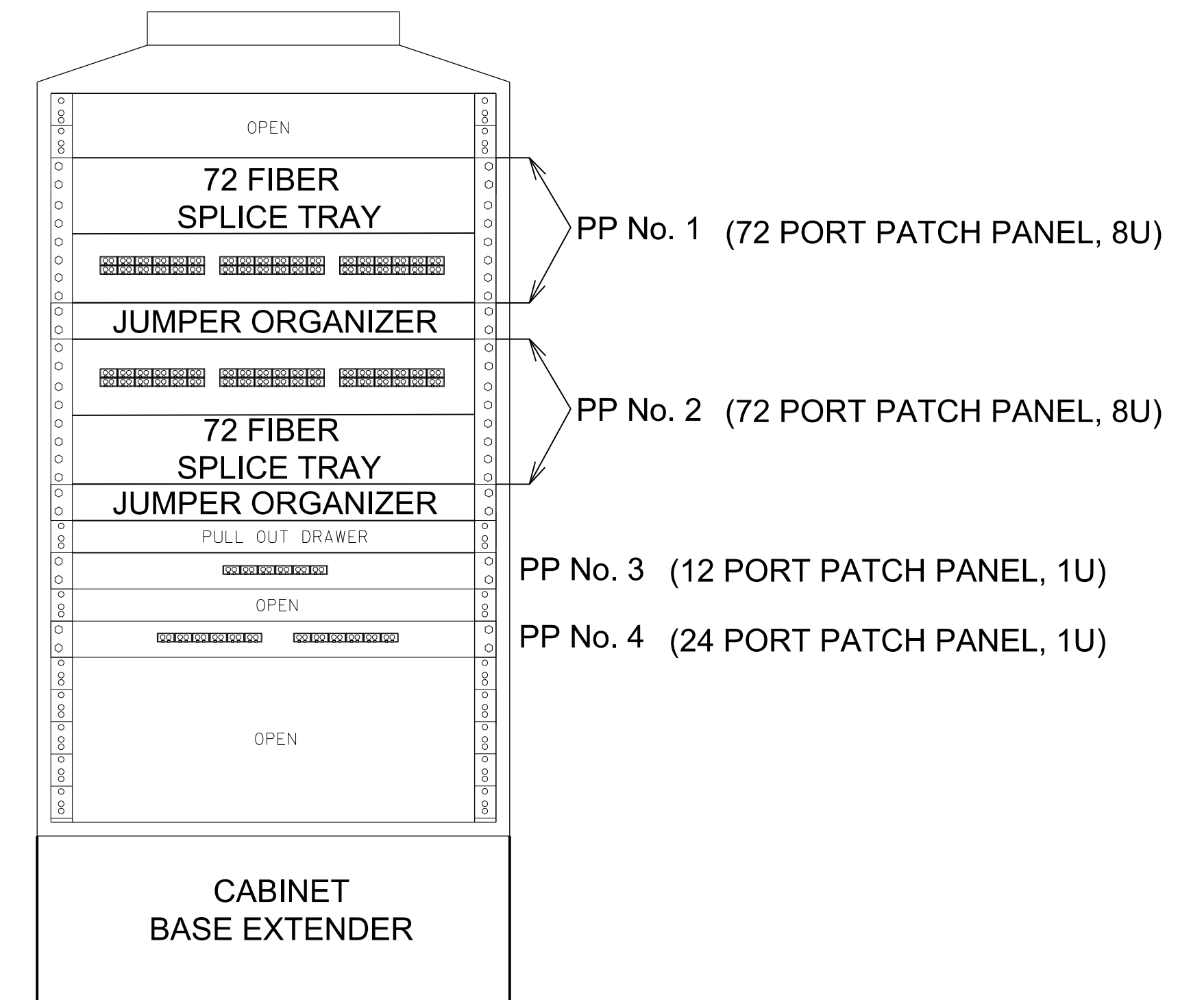
2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

- REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.



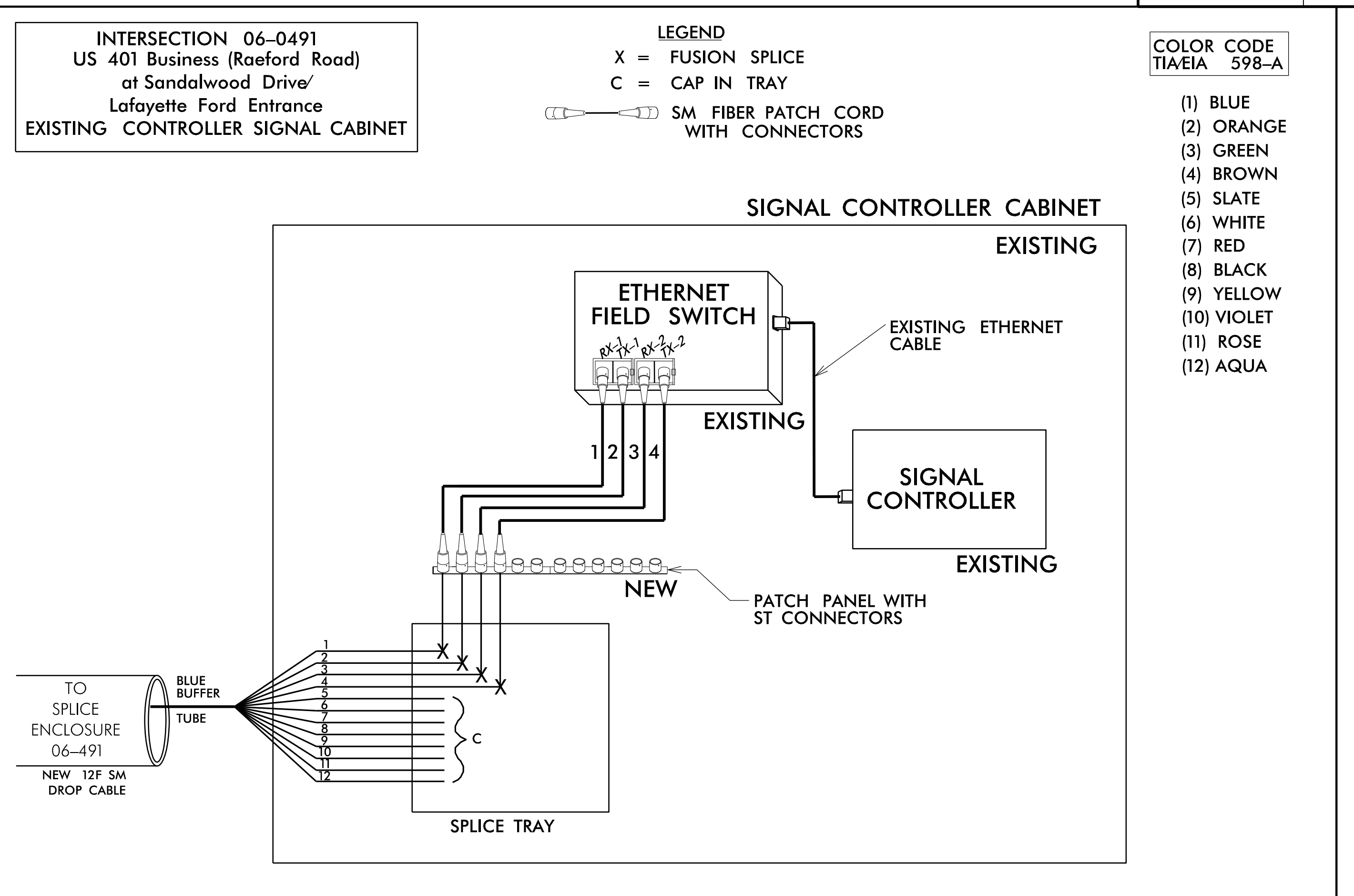
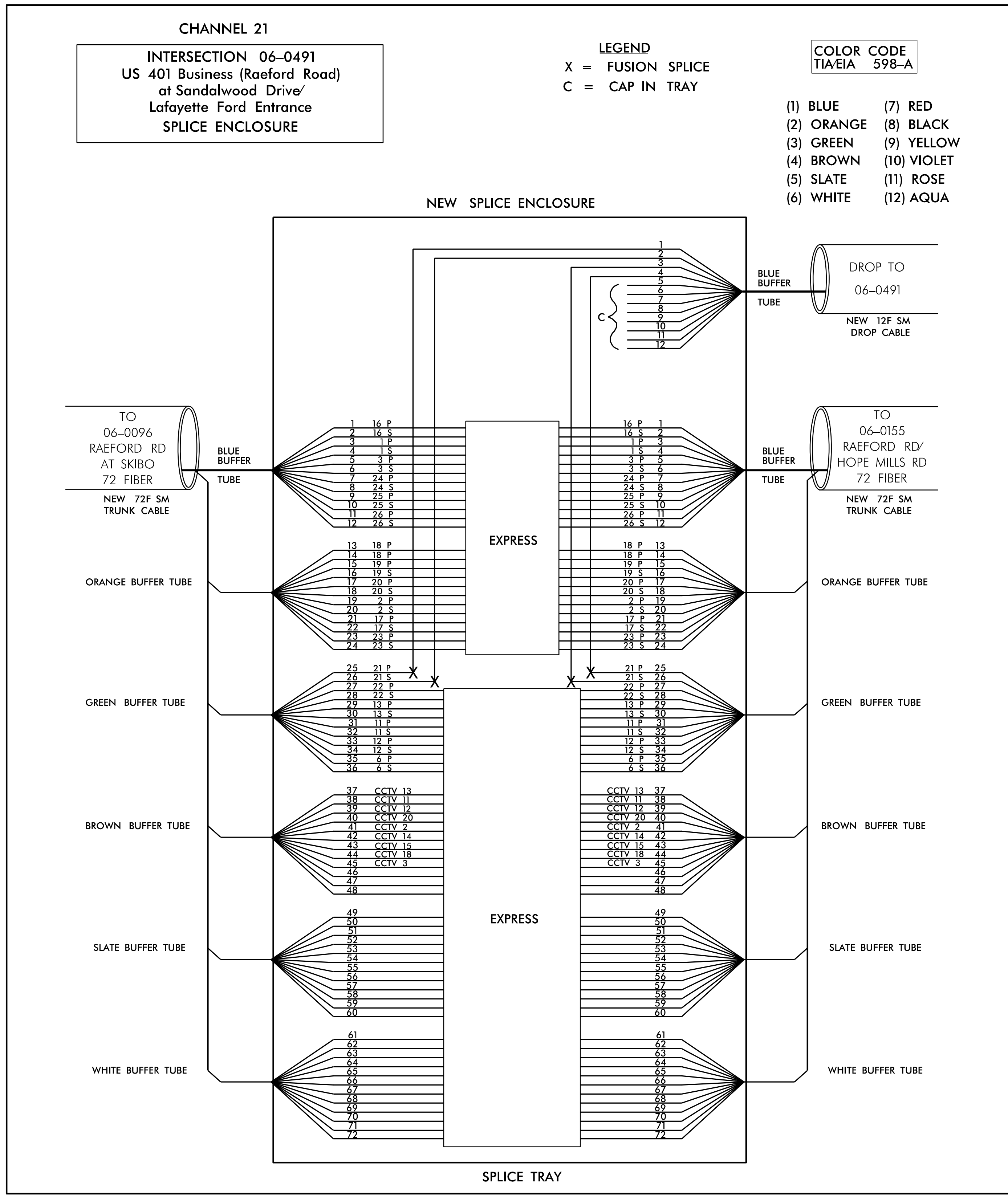
SPLICE CABINET (336)
INTERCONNECT CENTER
PATCH PANEL CONFIGURATION

FINAL

RAEFORD RD AT US 401 (SKIBO RD.)

3/27/2018 U:\171001766*Transportation*des.ign*Traffic*Signal*U-4405*U-4405_Splicing_SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0096</p>							
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>							
		<p>PLAN DATE: MARCH 2018</p>	<p>REVIEWED BY: D. HARRIS</p>						
<p>PREPARED BY: J. INGRAM</p>	<p>REVIEWED BY: B. WATSON</p>	<table border="1"> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	INIT.	DATE				<p>DocuSigned by: <i>Lawrence E. Overman</i> 3/29/2018 DATE</p>
REVISIONS	INIT.	DATE							



- FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - SPLICE LOCATION
 - DATE
 - COMPANY NAME
 - NAME OF INDIVIDUAL PERFORMING THE SPLICING

PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

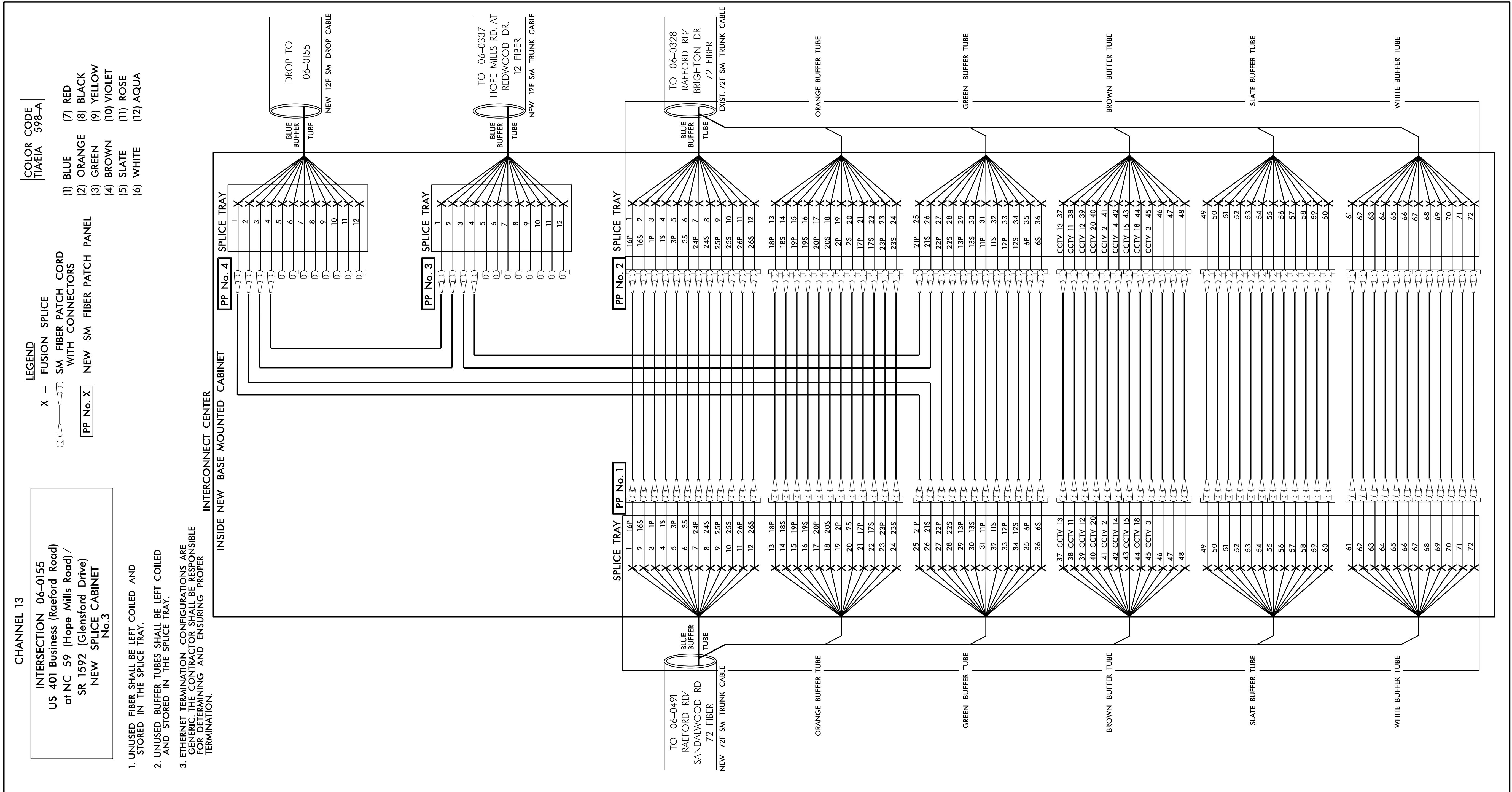
US 401 Business (Raeford Road)
 at Sandalwood Drive/
 Lafayette Ford Entrance

FINAL

3/27/2018 U:\171001766*Transportation\Traffic\Signal\Des\gn\ITS U-4405*U-4405_Fiber Splicing_SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		FIBER CABLE SPLICING DETAILS INTERSECTION 06-0491	
		DIVISION 06 CUMBERLAND CO. FAYETTEVILLE	PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS
PREPARED BY: J. INGRAM	REVIEWED BY: B. WATSON	REVISIONS	INIT. DATE
SCALE: N/A		DocuSigned by: <i>Lawrence E. Overman</i> 3/29/2018 CADD Filename:	

3/27/2018 U:\171001766*transportation*design*Traffic*Signals*Design*ITS U-4405*U-4405 Splice Details*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j.ingram



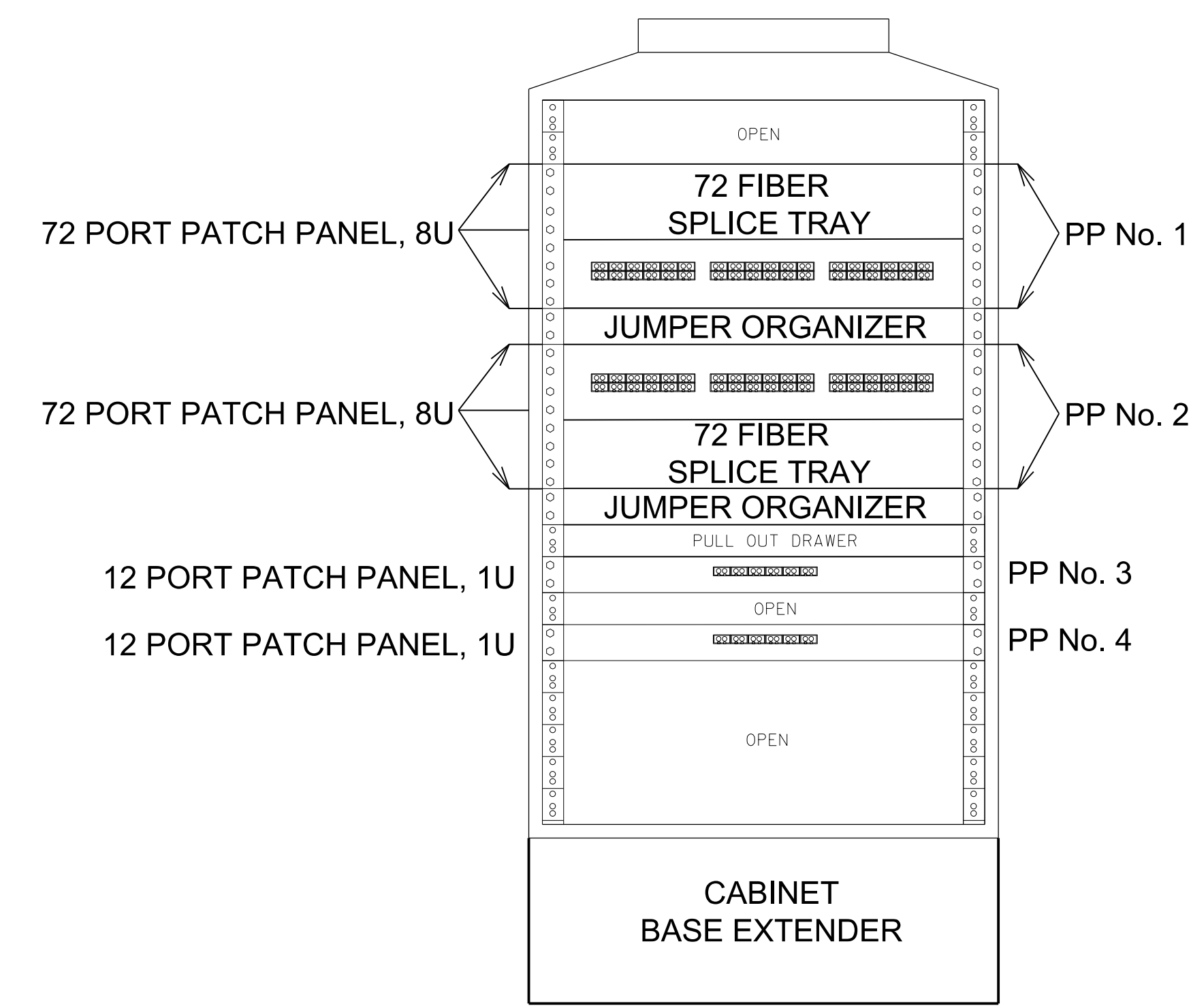
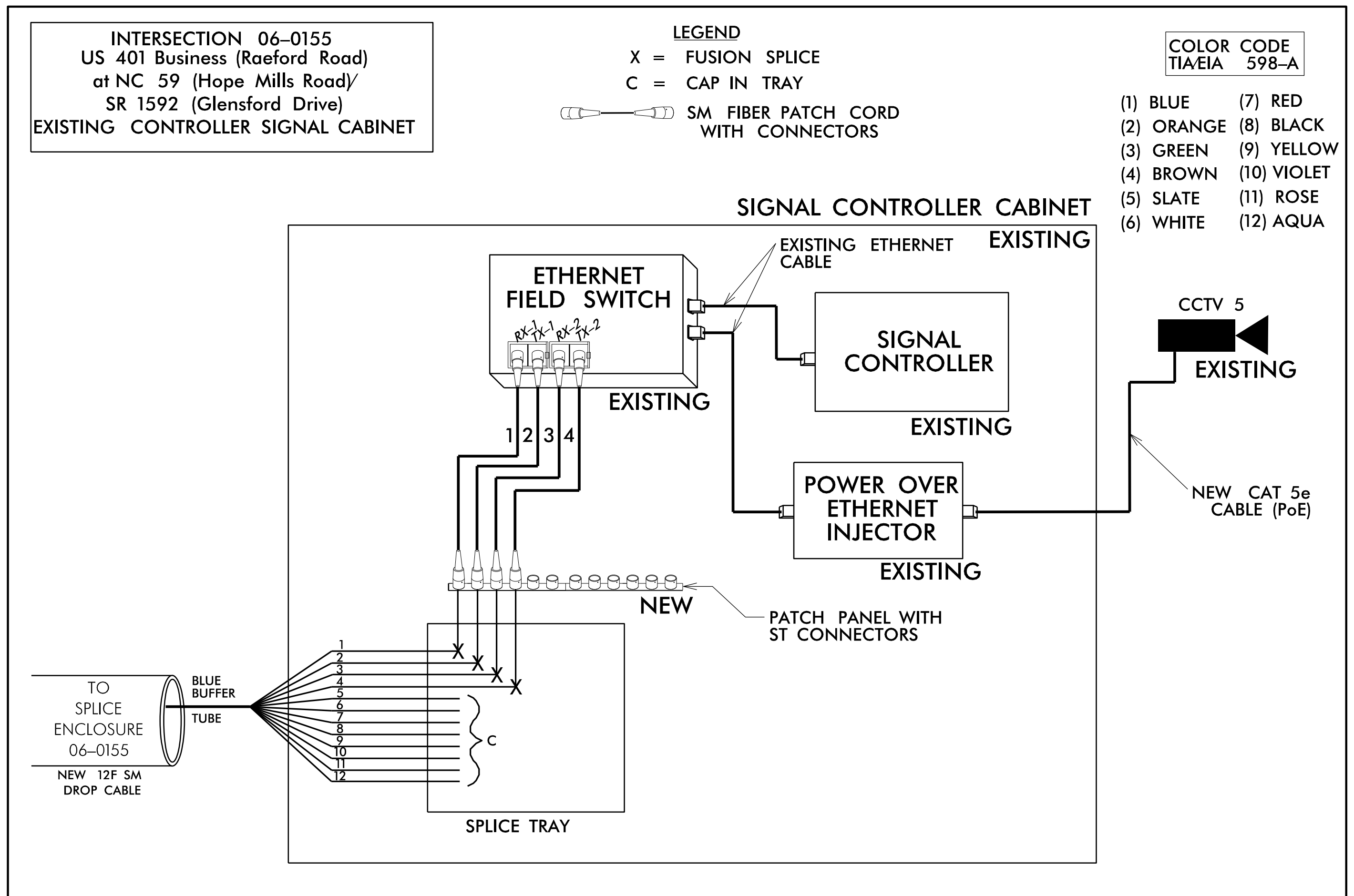
SEE SCP 31 SPLICE CABINET FOR INTERCONNECT CENTER LAY OUT

- FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

- INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:
 REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
 1.) SPLICE LOCATION
 2.) DATE
 3.) COMPANY NAME
 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
 PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

FINAL US 401 Business (Raeford Road)
at NC 59 (Hope Mills Road) / SR 1592 (Glensford Drive)

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>750 N. Greenfield Place, Garner, NC 27529 SCALE: N/A</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0155 SPLICE CABINET No.3</p>		<p>SEAL LAWRENCE E. OVERMAN PROFESSIONAL ENGINEER STATE OF NORTH CAROLINA SEAL 045933</p>
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p> <p>REVISIONS: INIT. DATE</p>		



SPLICE CABINET (336)
INTERCONNECT CENTER
PATCH PANEL CONFIGURATION

- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING

PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL US 401 Business (Raeford Road)
at NC 59 (Hope Mills Road)/SR 1592 (Glensford Drive)

3/27/2018 11:16:01 AM j.ingram

 Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672	 Prepared for the Offices of: 750 N. Greenfield Place, Garner, NC 27529 SCALE: N/A	FIBER CABLE SPLICING DETAILS INTERSECTION 06-0155 SPLICE CABINET No.3	SEAL LAWRENCE E. OWEN ENGINEER SEAL 045933 DATE 3/29/2018
		DIVISION 06 CUMBERLAND CO. FAYETTEVILLE PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON	
		REVISIONS INIT. DATE	

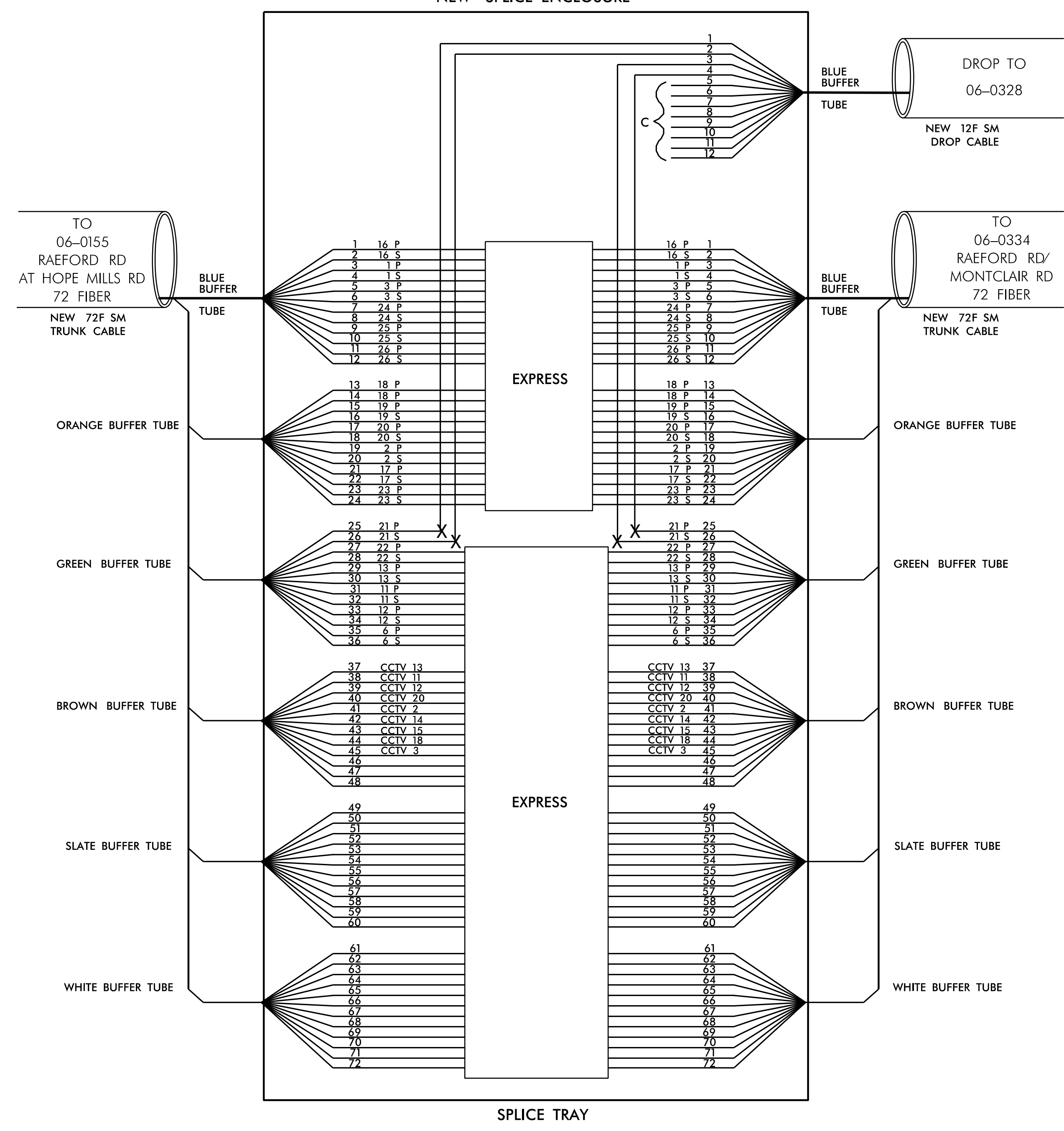
CADD Filename:

CHANNEL 21
INTERSECTION 06-0328
US 401 Business (Raeford Road)
at Brighton Road/
Fred Anderson Nissan
NEW SPLICE ENCLOSURE

LEGEND
 X = FUSION SPlice
 C = CAP IN TRAY

COLOR CODE
 TIA/EIA 598-A

(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

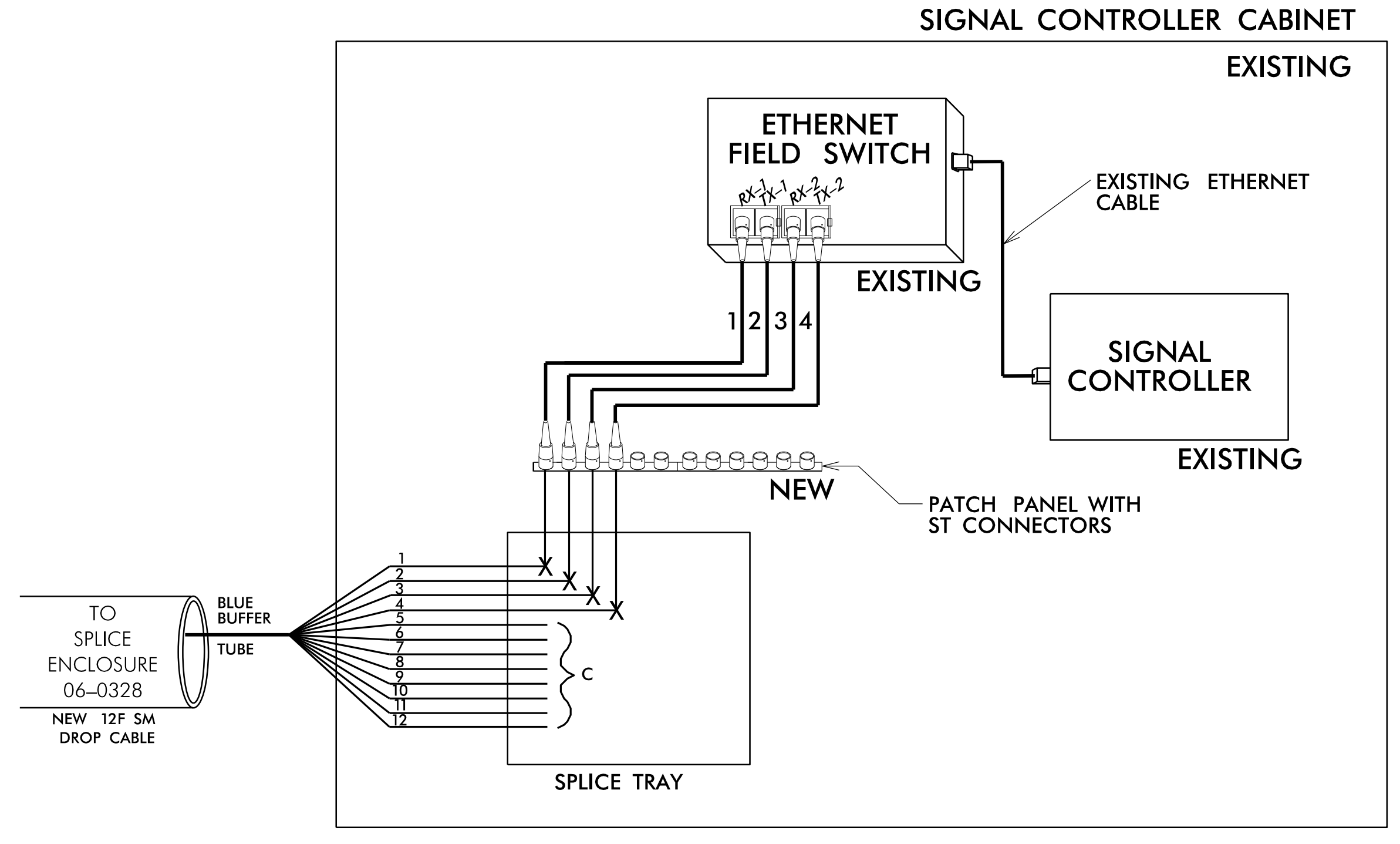


INTERSECTION 06-0328
US 401 Business (Raeford Road)
at Brighton Road/
Fred Anderson Nissan
EXISTING CONTROLLER SIGNAL CABINET

LEGEND
 X = FUSION SPlice
 C = CAP IN TRAY

COLOR CODE
 TIA/EIA 598-A

(1) BLUE
(2) ORANGE
(3) GREEN
(4) BROWN
(5) SLATE
(6) WHITE
(7) RED
(8) BLACK
(9) YELLOW
(10) VIOLET
(11) ROSE
(12) AQUA



- FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - SPLICE LOCATION
 - DATE
 - COMPANY NAME
 - NAME OF INDIVIDUAL PERFORMING THE SPLICING

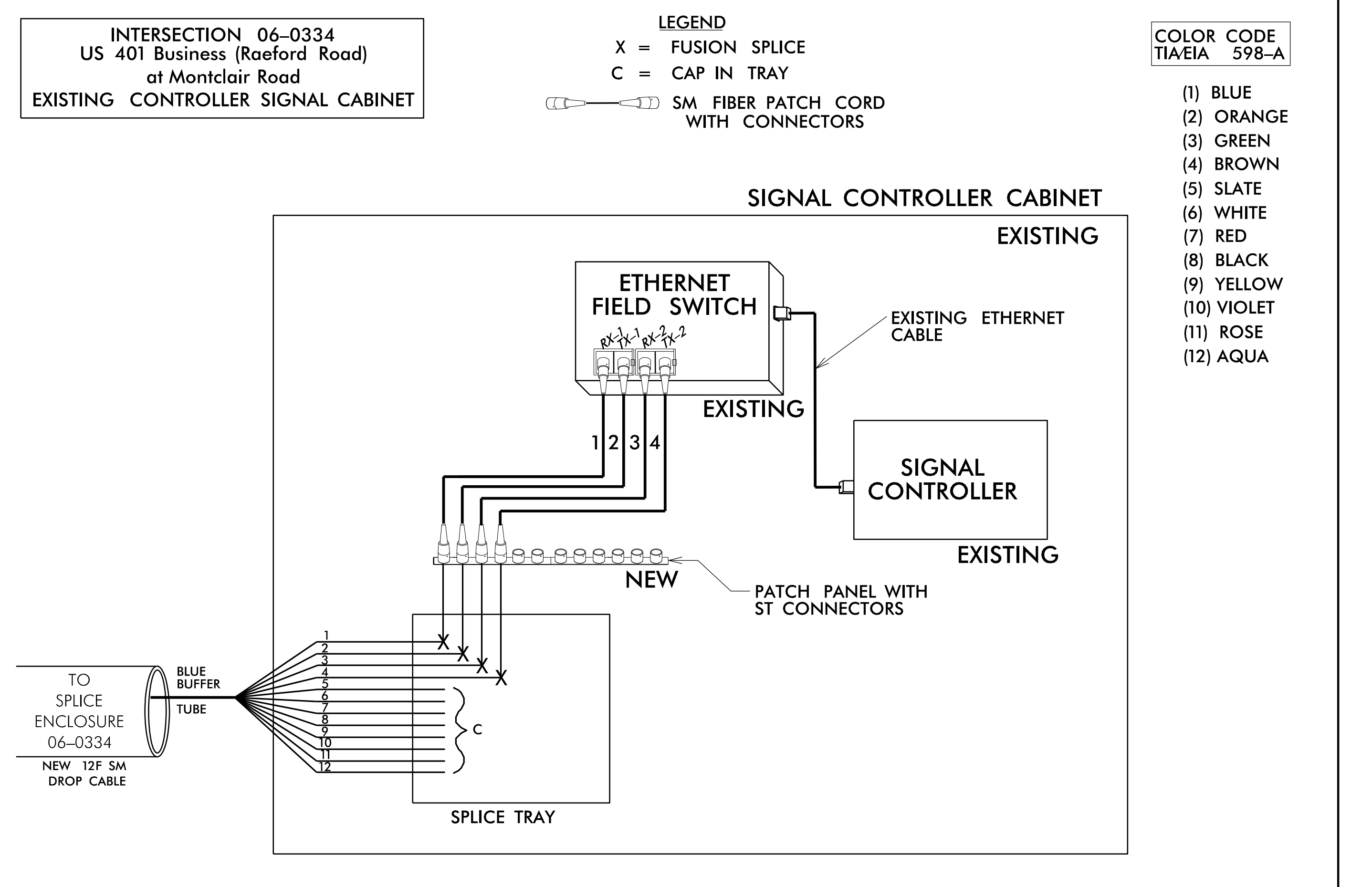
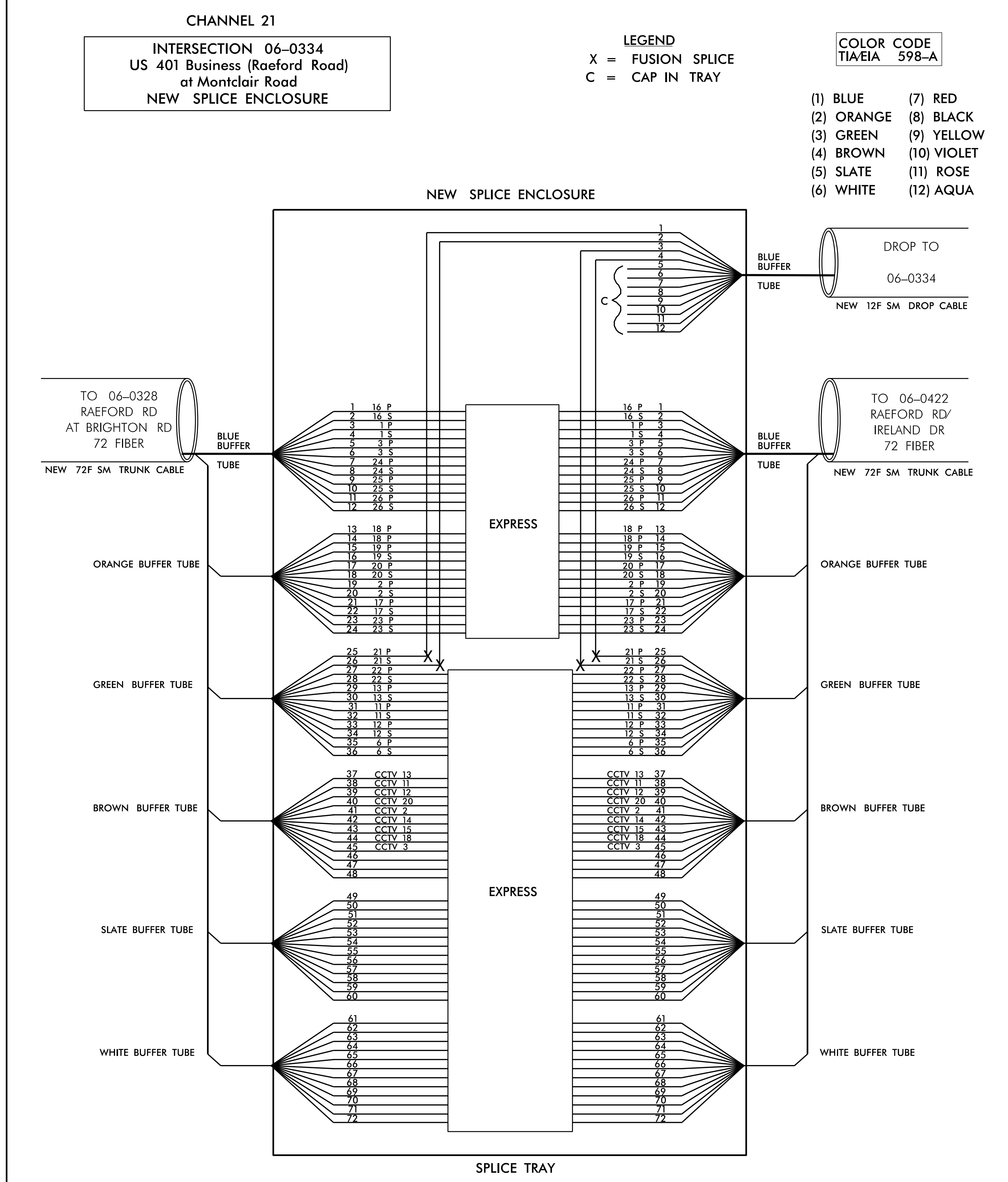
PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

US 401 Business (Raeford Road)
at Brighton Road/
Fred Anderson Nissan

FINAL

3/27/2018 U:\71001766*Transportation\des\gn\Traffic\gn\des\gn\ITS U-4405*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0328</p>		<p>SEAL LAWRENCE E. OVERMAN PROFESSIONAL ENGINEER SEAL 045933 DATE 3/29/2018</p>									
		<p>Prepared for the Offices of:</p> <p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p> <p>SCALE: N/A</p>	<p>REVISIONS</p> <table border="1"> <tr><th>NO.</th><th>DESCRIPTION</th><th>INIT.</th><th>DATE</th></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>		NO.	DESCRIPTION	INIT.	DATE					
NO.	DESCRIPTION	INIT.	DATE										



- COLOR CODE TIA/EIA 598-A**
- (1) BLUE
 - (2) ORANGE
 - (3) GREEN
 - (4) BROWN
 - (5) SLATE
 - (6) WHITE
 - (7) RED
 - (8) BLACK
 - (9) YELLOW
 - (10) VIOLET
 - (11) ROSE
 - (12) AQUA

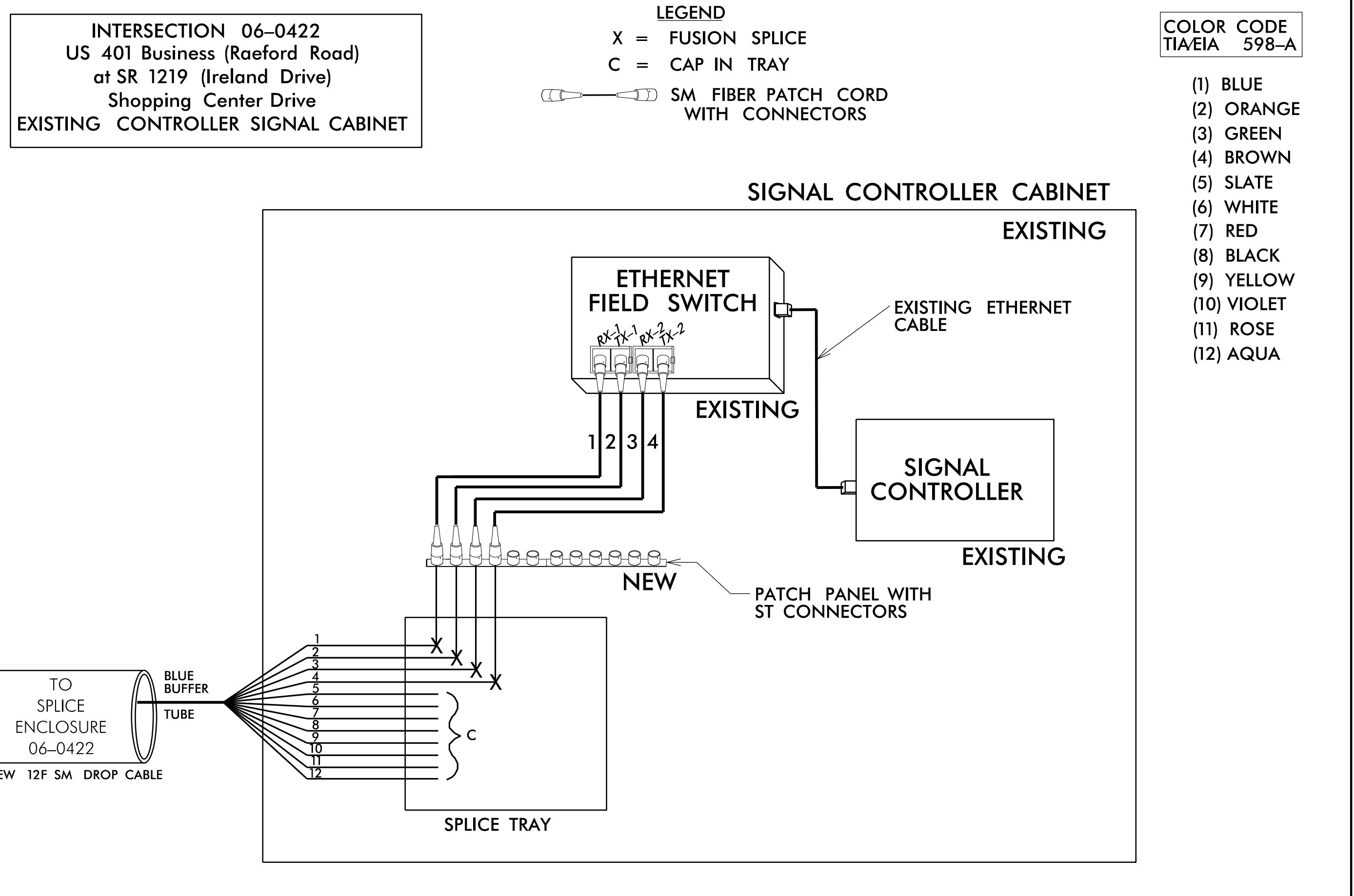
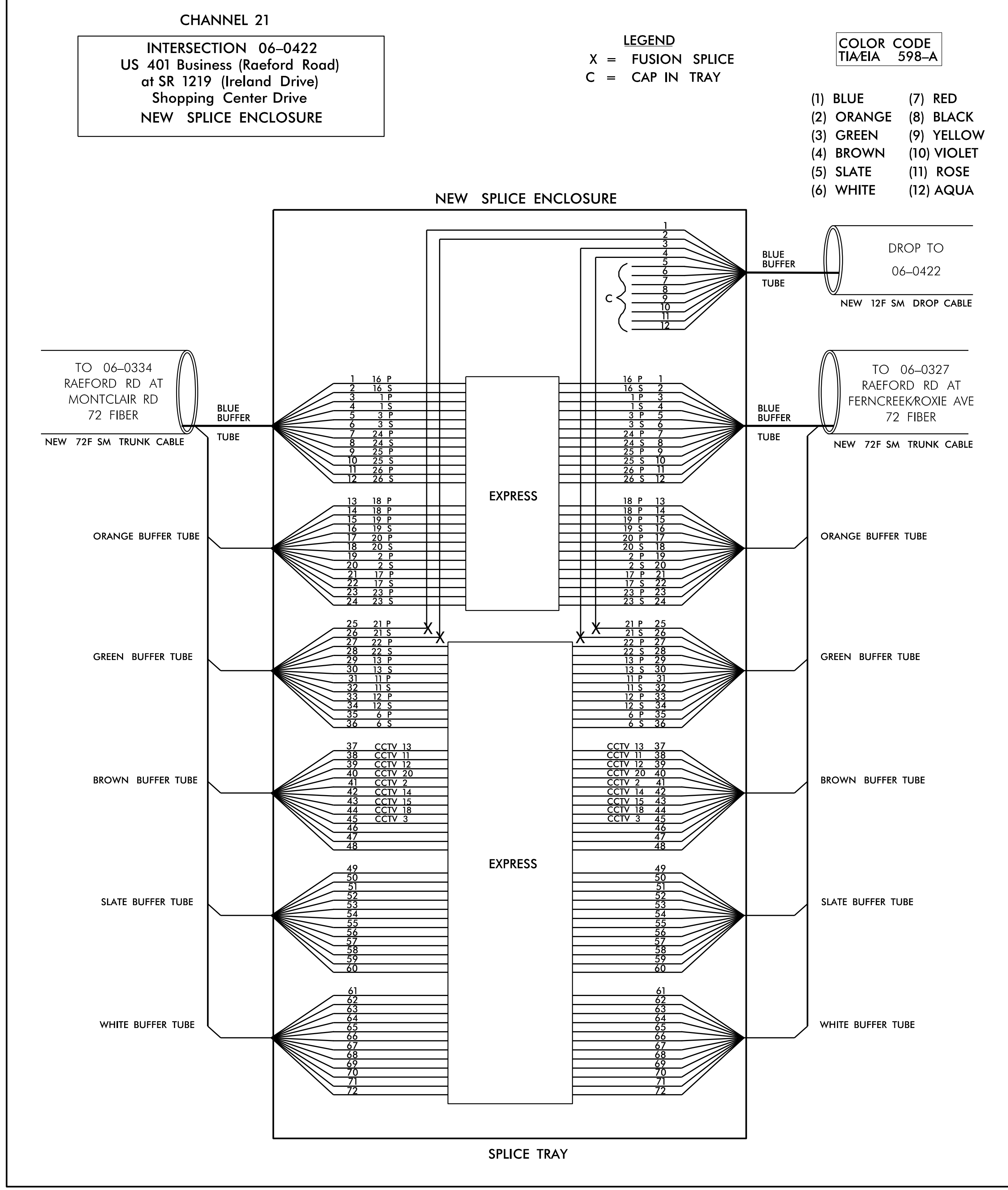
- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:
- REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

US 401 Business (Raeford Road)
at Montclair Road

FINAL

3/27/2018 U:\171001766*Transportation\Traffic\Signal\Des\gn\ITS U-4405*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0334</p>									
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>SCALE: N/A</p>								
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	REVISIONS	INIT.	DATE					<p>DocuSigned by: Lawrence E. Overman 3/29/2018 10:56:43 AM DATE</p> <p>CADD Filename:</p>	
NO.	REVISIONS	INIT.	DATE								



- FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- INCLUDE ON THE COVER OF EACH SPlice TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPlice ENCLOSURE"

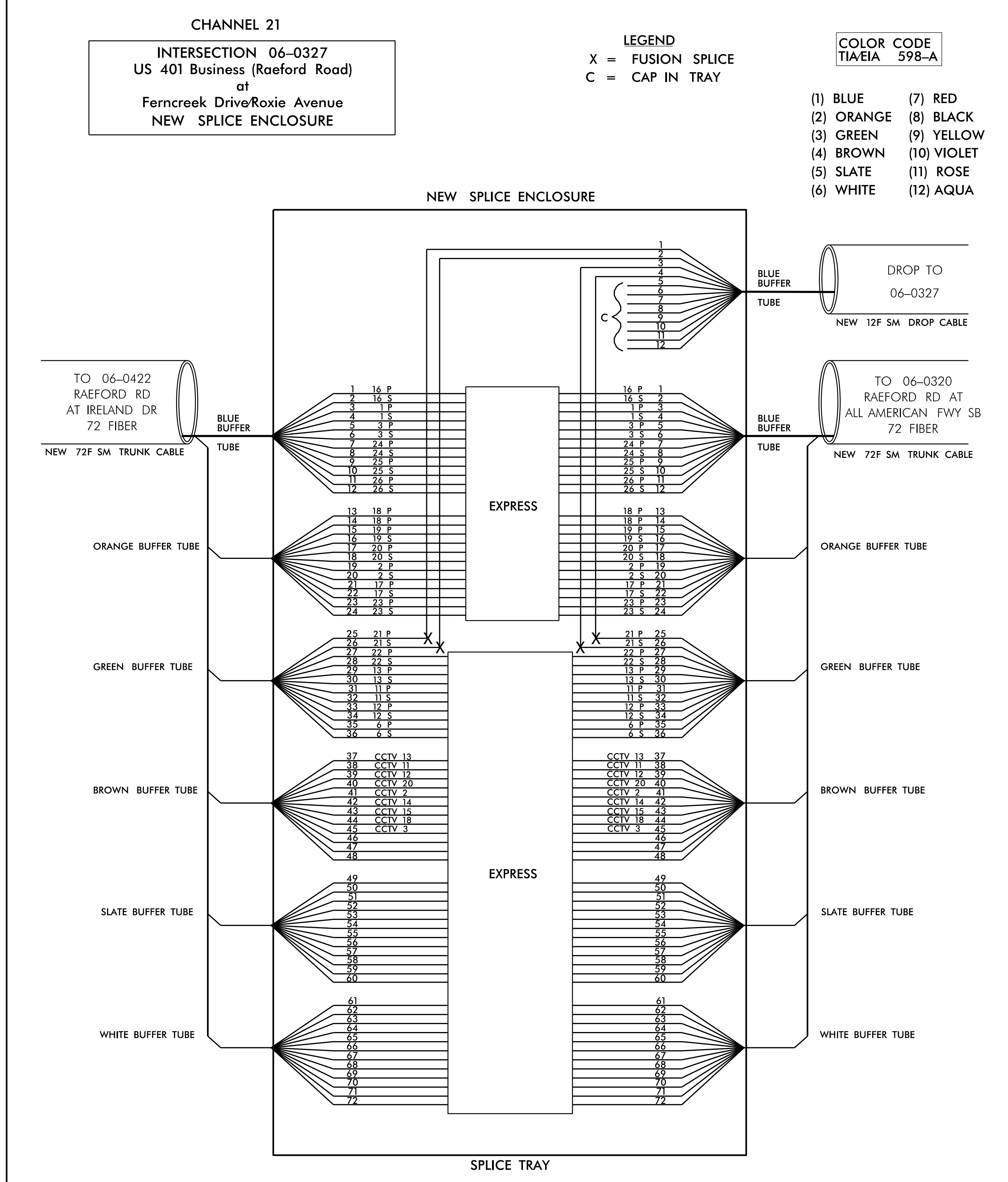
 - SPlice LOCATION
 - DATE
 - COMPANY NAME
 - NAME OF INDIVIDUAL PERFORMING THE SPlicing
 PRIOR TO INSTALLING THE COVER ON THE SPlice TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPlice TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPlice TRAY.
- UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPlice TRAY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

US 401 Business (Raeford Road)
 at SR 1219 (Ireland Drive)
 Shopping Center Drive

FINAL

3/27/2018 U:\171001766*Transportation\des\gn\ITS U-4405*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>FIBER CABLE SPlicing DETAILS INTERSECTION 06-0422</p>		<p>SEAL</p> <p>SEAL 045933</p> <p>Lawrence E. Owen 3/29/2018</p>
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>SCALE</p> <p>N/A</p>	

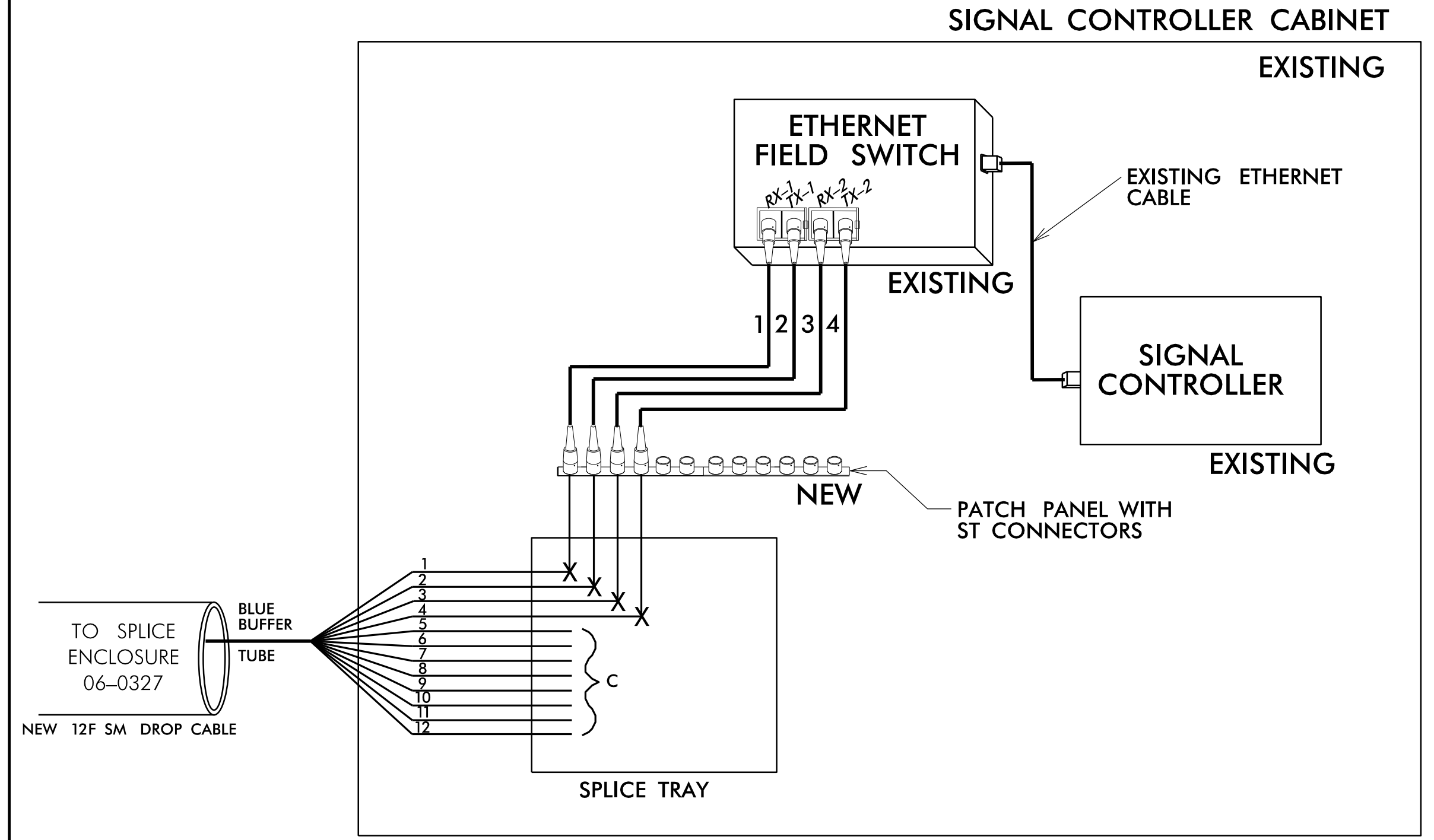


INTERSECTION 06-0327
US 401 Business (Raeford Road)
at
Ferncreek Drive/Roxie Avenue
EXISTING CONTROLLER SIGNAL CABINET

LEGEND
X = FUSION SPlice
C = CAP IN TRAY
SM FIBER PATCH CORD WITH CONNECTORS

COLOR CODE
TIA/EIA 598-A

- (1) BLUE
- (2) ORANGE
- (3) GREEN
- (4) BROWN
- (5) SLATE
- (6) WHITE
- (7) RED
- (8) BLACK
- (9) YELLOW
- (10) VIOLET
- (11) ROSE
- (12) AQUA



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPlice ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICE

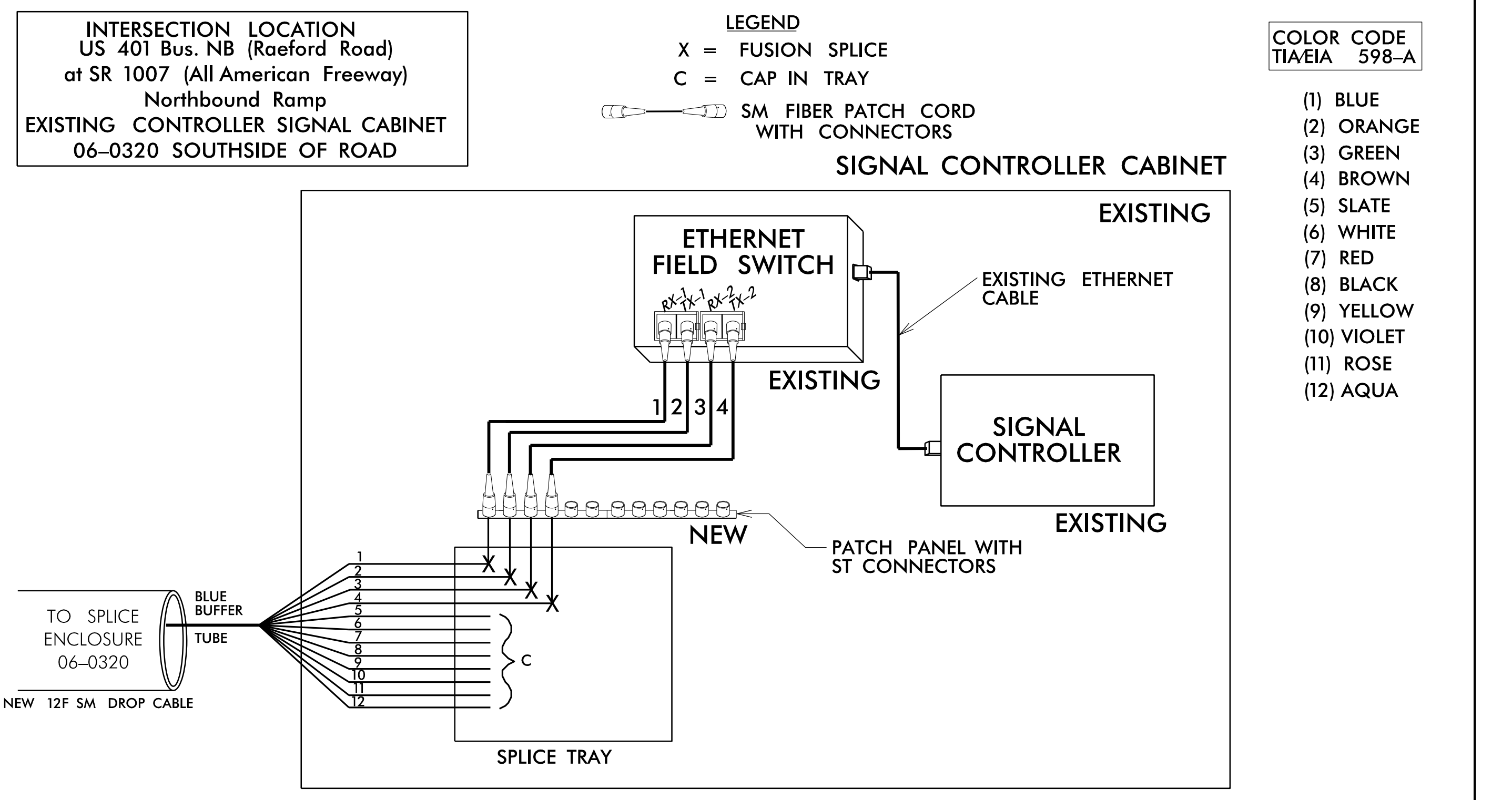
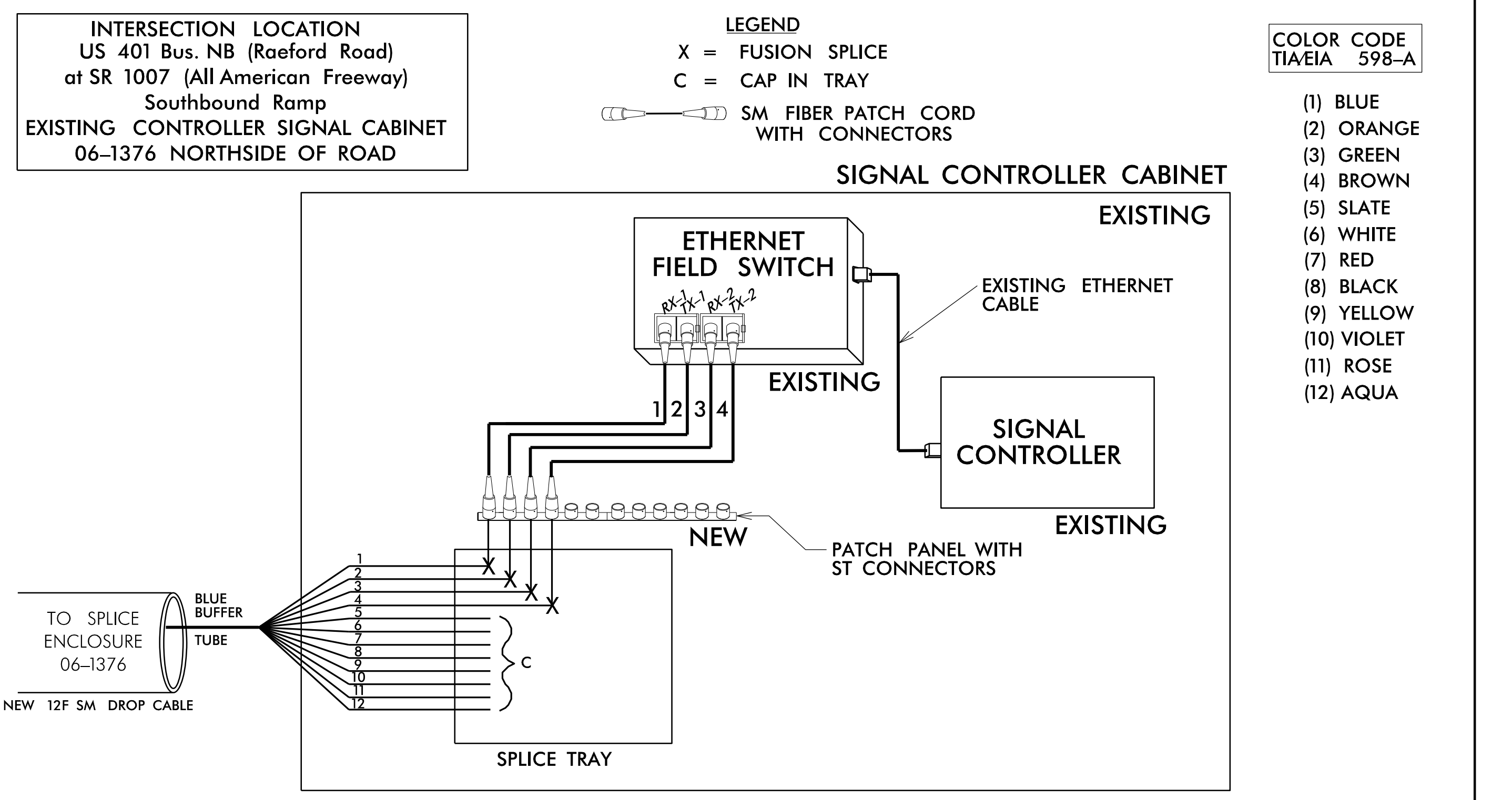
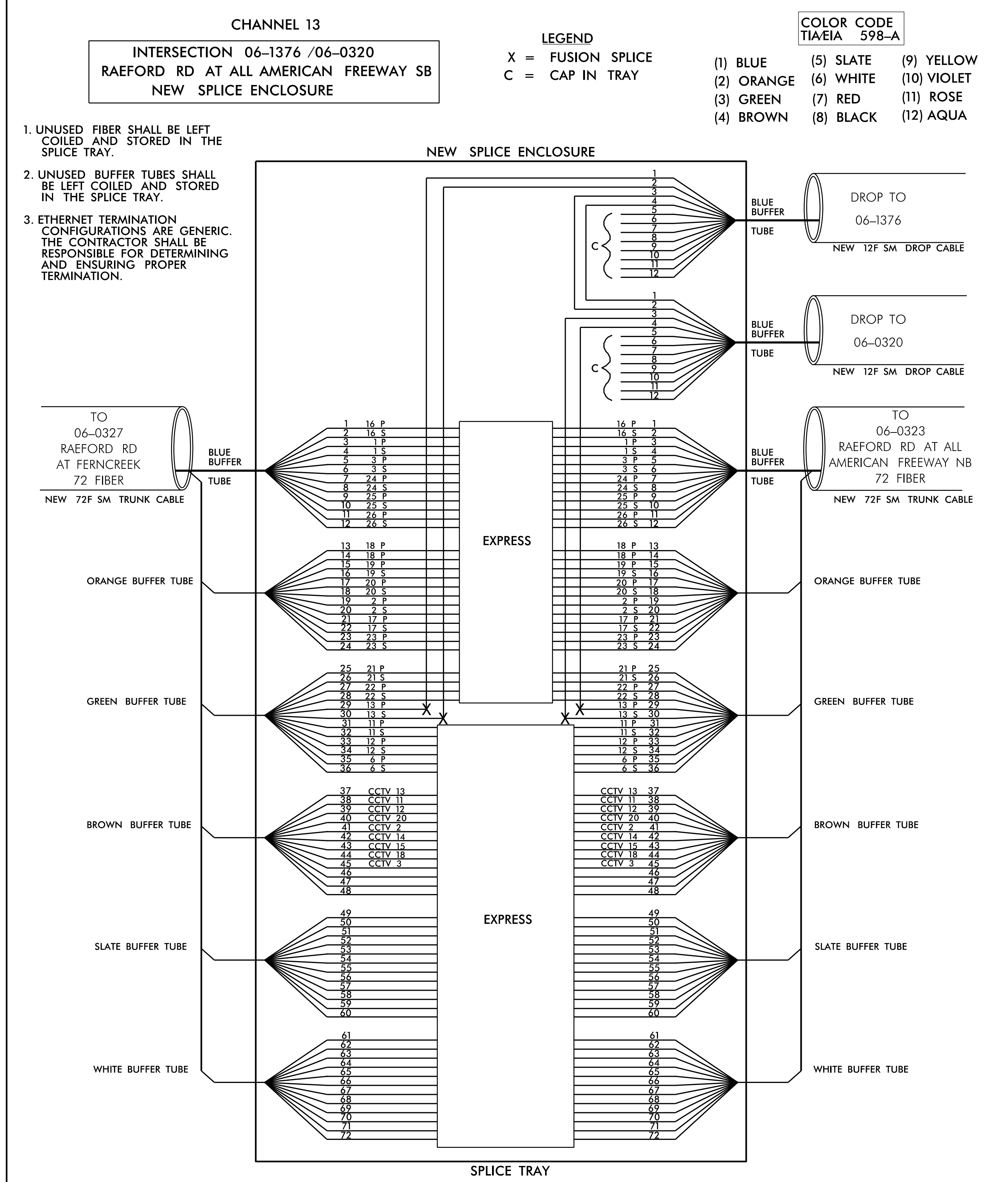
PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

US 401 Business (Raeford Road)
at Ferncreek Drive/Roxie Avenue

3/27/2018 U:\1710011766*Transportation\Traffic\Signal\des\gn\ITS U-4405*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j.ingram

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>750 N. Greenfield Pkwy., Garner, NC 27529 SCALE N/A</p>	<p>FIBER CABLE SPLICE DETAILS INTERSECTION 06-0327</p>		<p>SEAL LAWRENCE E. OVERMAN ENGINEER SEAL 045933</p>
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>DATE</p> <p>INIT.</p>	



1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
- 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
- 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

2) INCLUDE ON THE COVER OF EACH SPlice TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPlice ENCLOSURE"

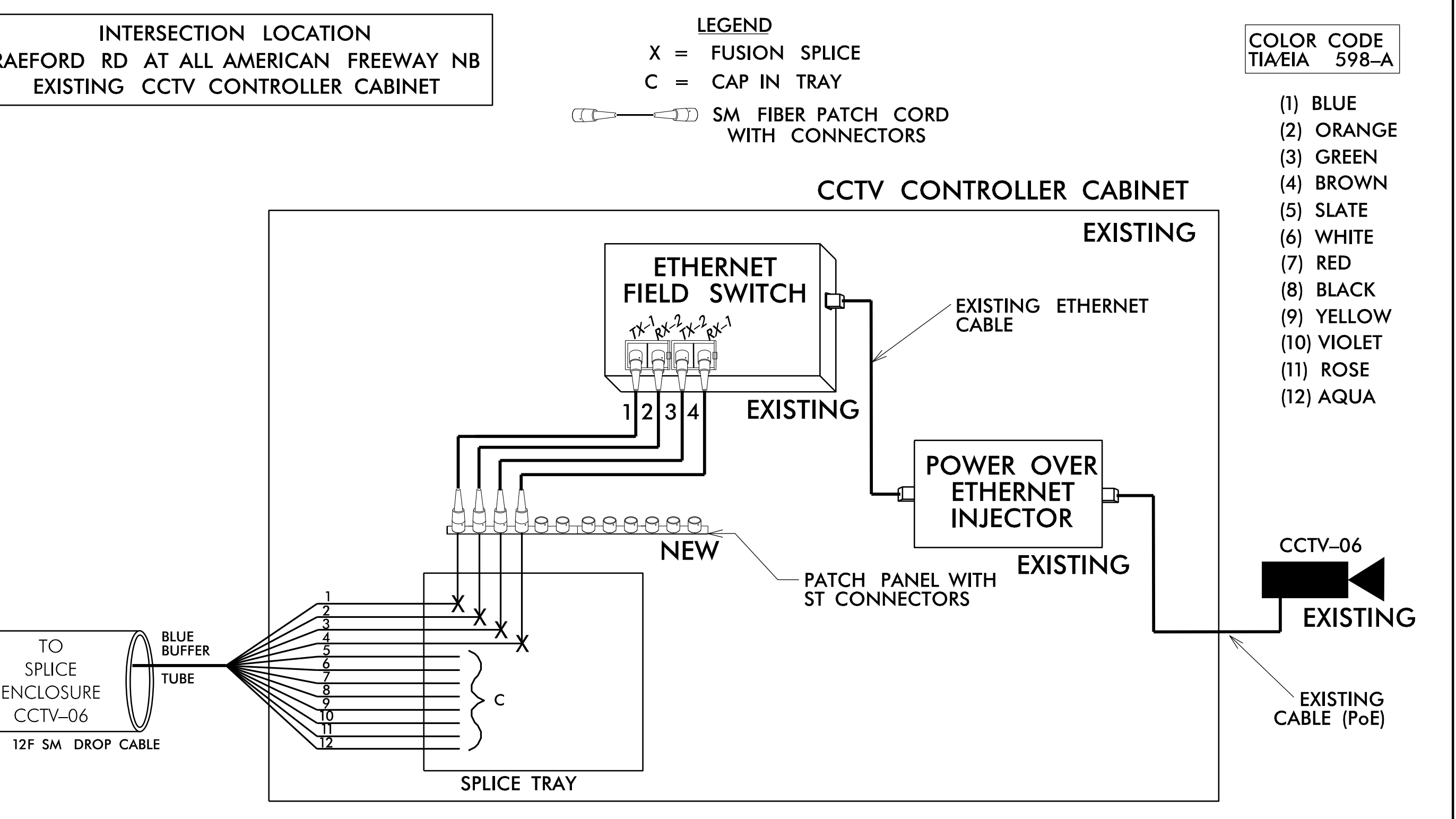
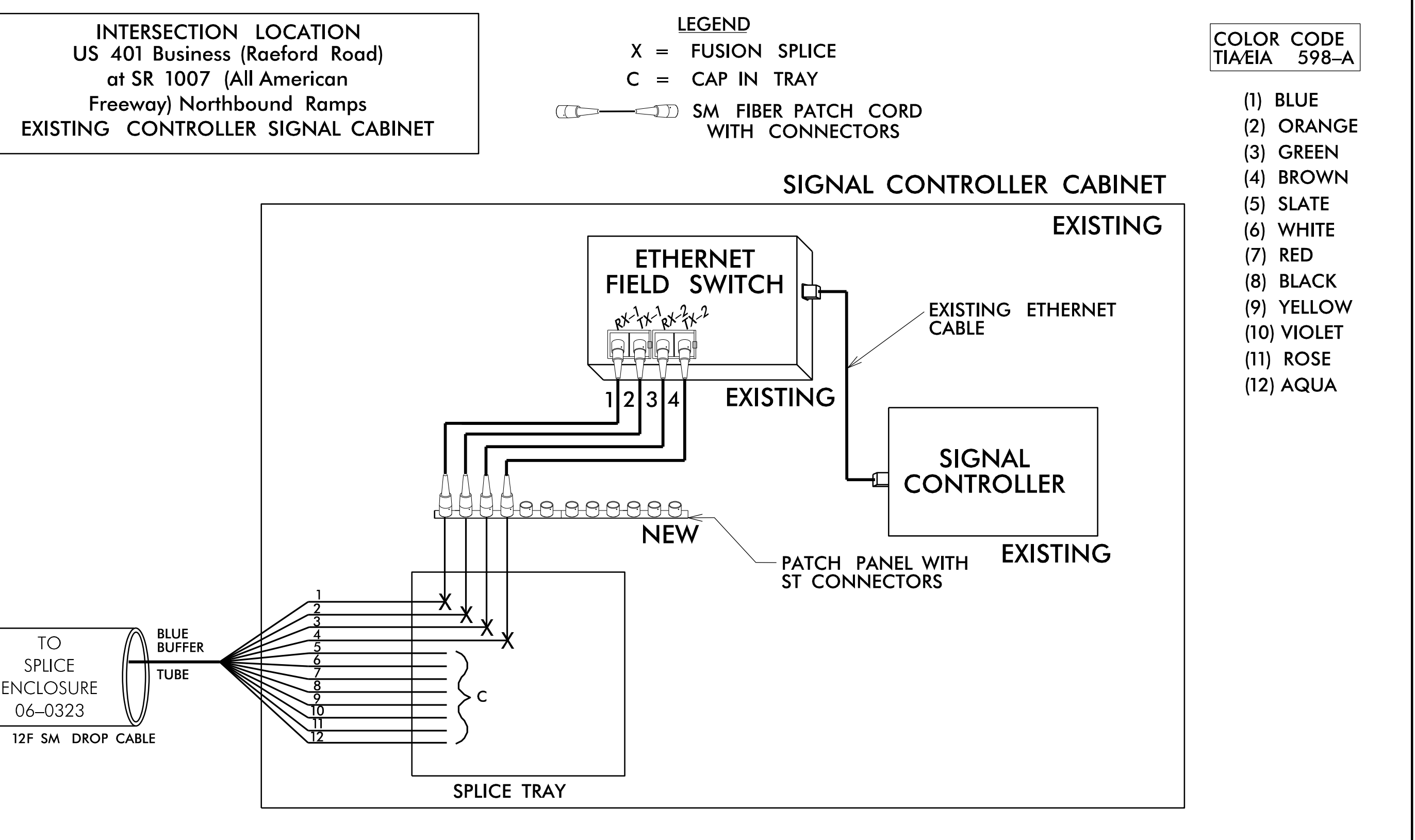
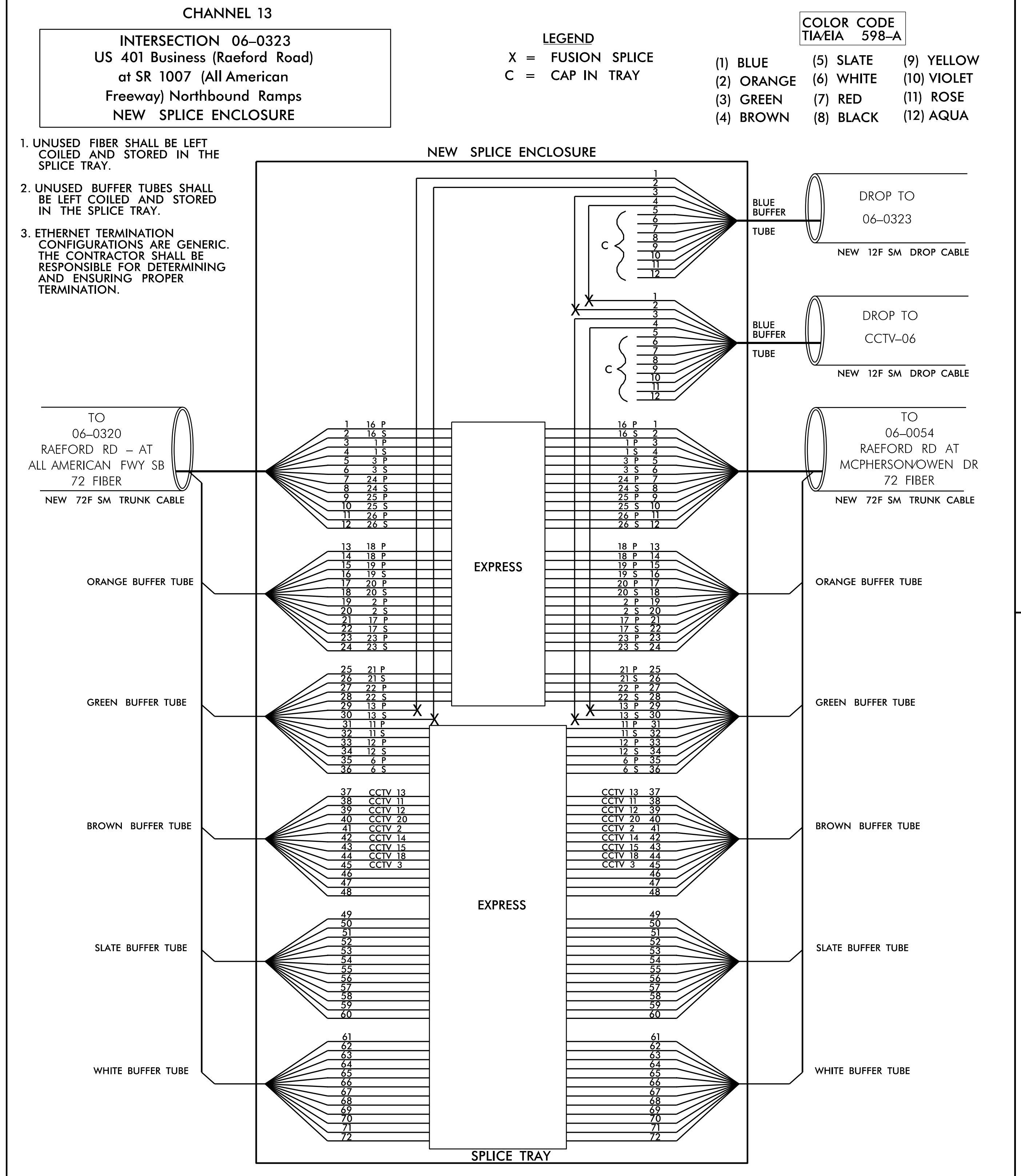
- 1.) SPlice LOCATION
- 2.) DATE
- 3.) COMPANY NAME
- 4.) NAME OF INDIVIDUAL PERFORMING THE SPlicing PRIOR TO INSTALLING THE COVER ON THE SPlice TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPlice TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

US 401 Bus. NB (Raeford Road)
at SR 1007 (All American Freeway)
Southbound Ramps

FINAL

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>750 N. Greenfield Pkwy., Garner, NC 27529 SCALE: N/A</p>	<p>FIBER CABLE SPlicing DETAILS INTERSECTION 06-0320 / 06-1376</p>		<p>SEAL LAWRENCE E. OWEN PROFESSIONAL ENGINEER SEAL 045933 DATE 3/29/2018</p>
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>	<p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p>	
<p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>		<p>REVISIONS</p>	<p>INIT. DATE</p>	<p>DocuSigned by: Lawrence E Owen 3/29/2018 CADD Filename:</p>

3/27/2018 U:\71001766*Transportation\Information\des\gn\ITS U-4405*U-4405_Splicing_SCP-20 - SCP-42.dgn j.ingram



3/27/2018 U:\17100\17166*Transportation\Information\des\gn*Traffic*Signal*Des\des\gn*ITS U-4405*U-4405_Fiber Splicing SCP-20 - SCP-42.dgn j.ingram

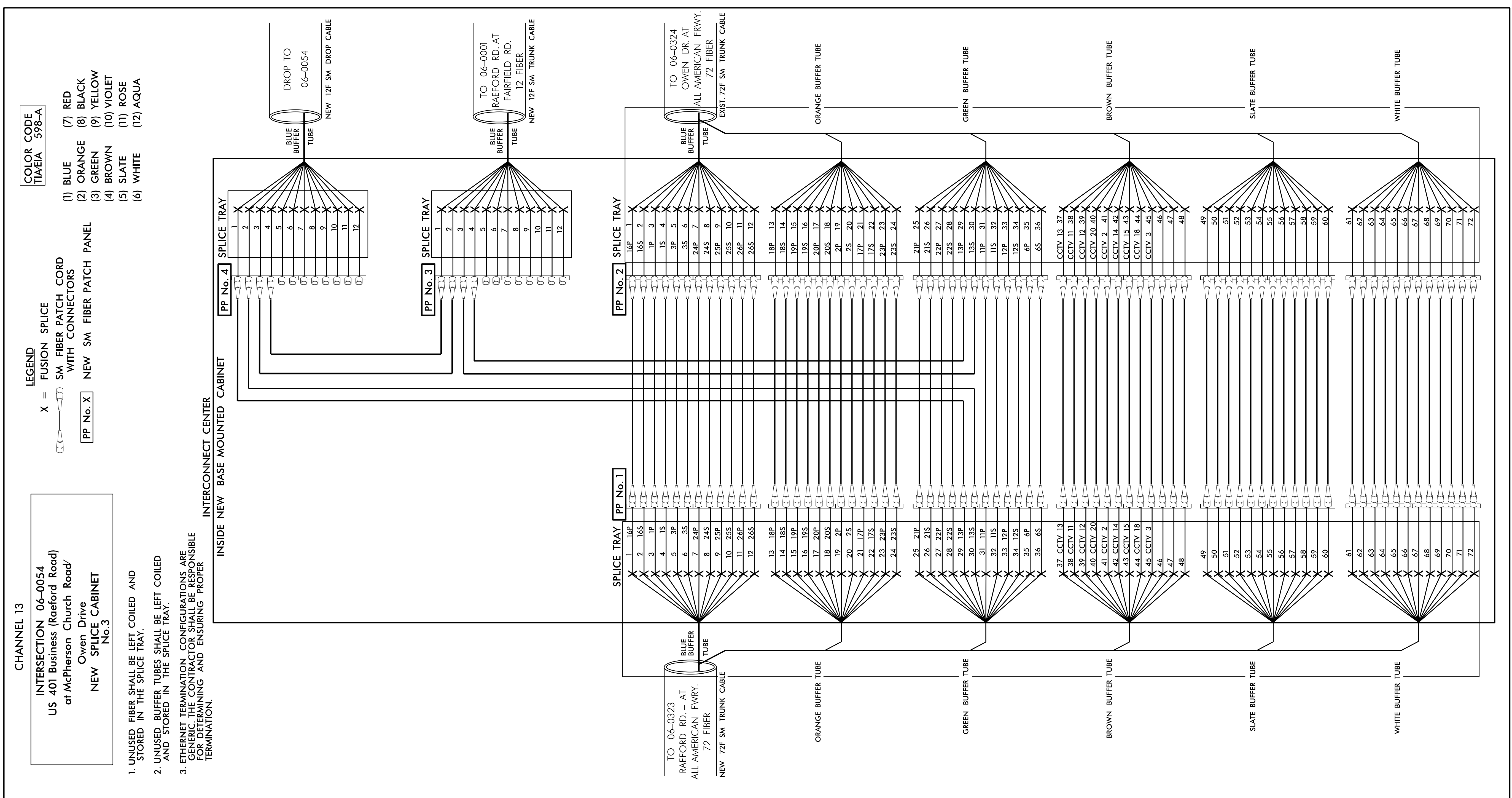
- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

- 2) INCLUDE ON THE COVER OF EACH SPlice TRAY THE FOLLOWING:
REFERENCE SECTION 1731 "FIBER OPTIC SPlice ENCLOSURE"
- 1.) SPlice LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPlicing
- PRIOR TO INSTALLING THE COVER ON THE SPlice TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPlice TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

FINAL US 401 Business (Raeford Road) at SR 1007 (All American Freeway) Northbound Ramps

 Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672	<p style="font-size: small;">Prepared for the Offices of:</p> 750 N. Greenfield Pkwy., Garner, NC 27529 SCALE: N/A	FIBER CABLE SPlicing DETAILS INTERSECTION 06-0323		<p style="font-size: x-small;">SEAL</p> SEAL 045933 LAWRENCE E. OWEN PROFESSIONAL ENGINEER DATE: 3/29/2018 CADD Filename:						
		DIVISION 06 CUMBERLAND CO. FAYETTEVILLE PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE			
REVISIONS	INIT.	DATE								

OFF PROJECT
 BACK TO
 CENTRAL



CHANNEL 13
 INTERSECTION 06-0054
 US 401 Business (Raeford Road)
 at McPherson Church Road/
 Owen Drive
 NEW SPLICE CABINET
 No.3

COLOR CODE
 TIA/EIA 598-A

- (1) BLUE
- (2) ORANGE
- (3) GREEN
- (4) BROWN
- (5) SLATE
- (6) WHITE
- (7) RED
- (8) BLACK
- (9) YELLOW
- (10) VIOLET
- (11) ROSE
- (12) AQUA

- LEGEND**
- X = FUSION SPLICE
 - [Symbol] = SM FIBER PATCH CORD WITH CONNECTORS
 - [PP No. X] = NEW SM FIBER PATCH PANEL

1. UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
2. UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
3. ETHERNET TERMINATION CONFIGURATIONS ARE GENERIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATION.

SEE SCP 38 SPLICE CABINET FOR INTERCONNECT CENTER LAY OUT

- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
 PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

US 401 Business (Raeford Road)
 at McPherson Church Road/Owen Drive

FINAL

Stantec Consulting Services Inc.
 801 Jones Franklin Road
 Suite 300
 Raleigh, NC 27606
 Tel. (919) 851-8866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

Prepared for the Offices of:

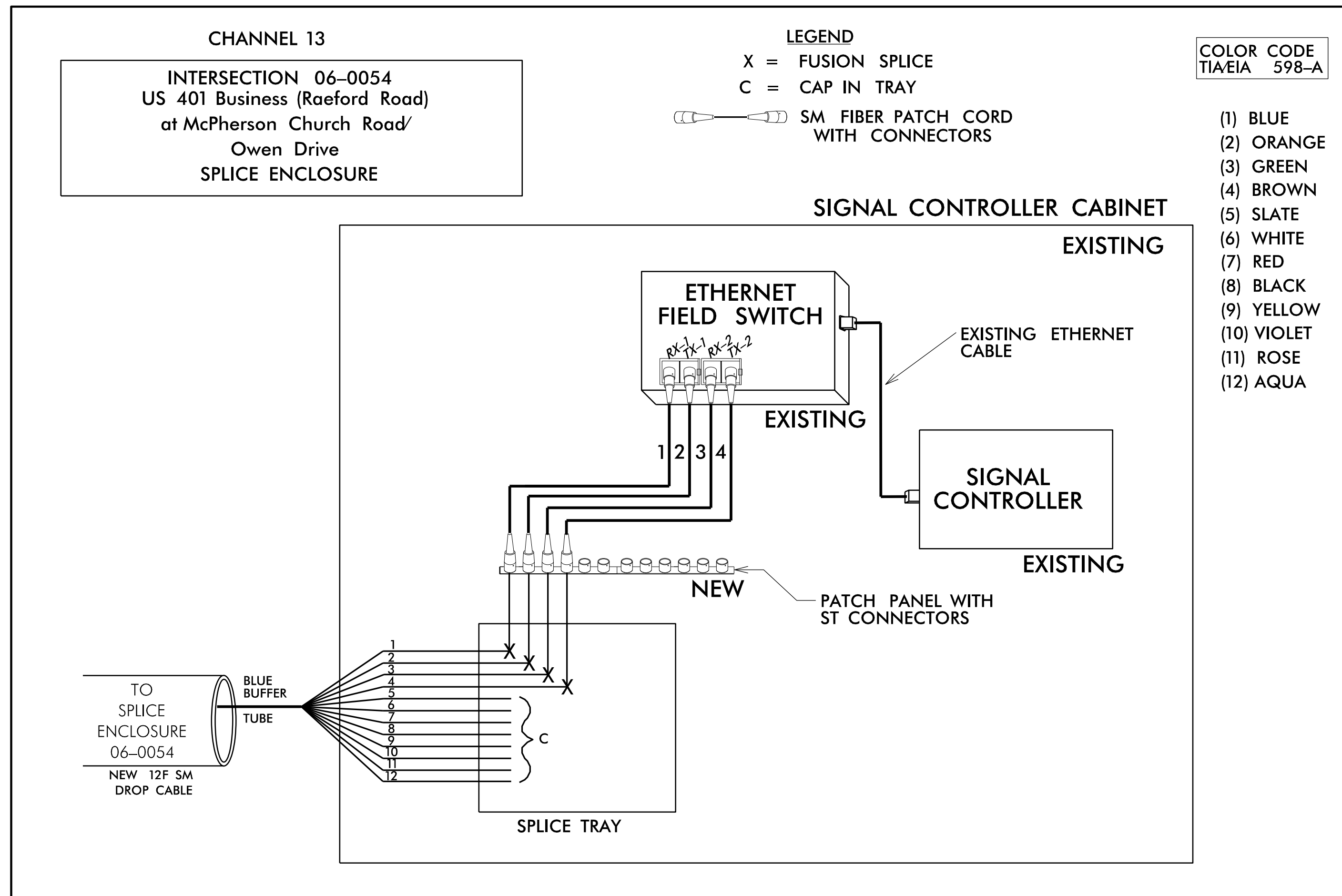
 750 N. Greenfield Place, Garner, NC 27529
 SCALE: N/A

FIBER CABLE SPLICING DETAILS			
INTERSECTION 06-0054			
SPLICE CABINET No.3			
DIVISION 06		CUMBERLAND CO.	
PLAN DATE: MARCH 2018		REVIEWED BY: D. HARRIS	
PREPARED BY: J. INGRAM		REVIEWED BY: B. WATSON	
REVISIONS	INIT.	DATE	

SEAL

Lawrence E. Owen 3/29/2018
 DATE

CADD Filename:



1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL Mc CARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
- 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
- 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

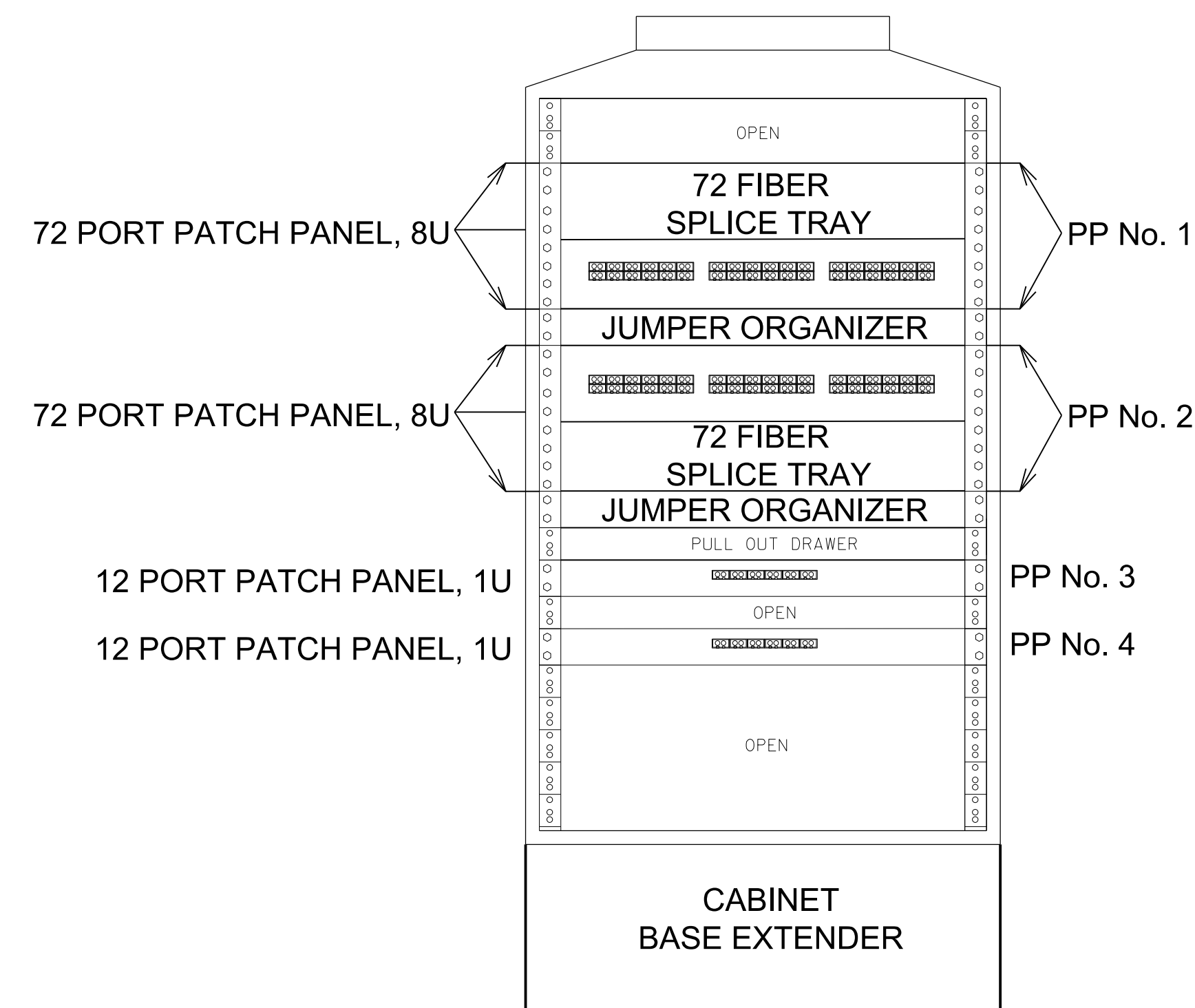
2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

- REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.

5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

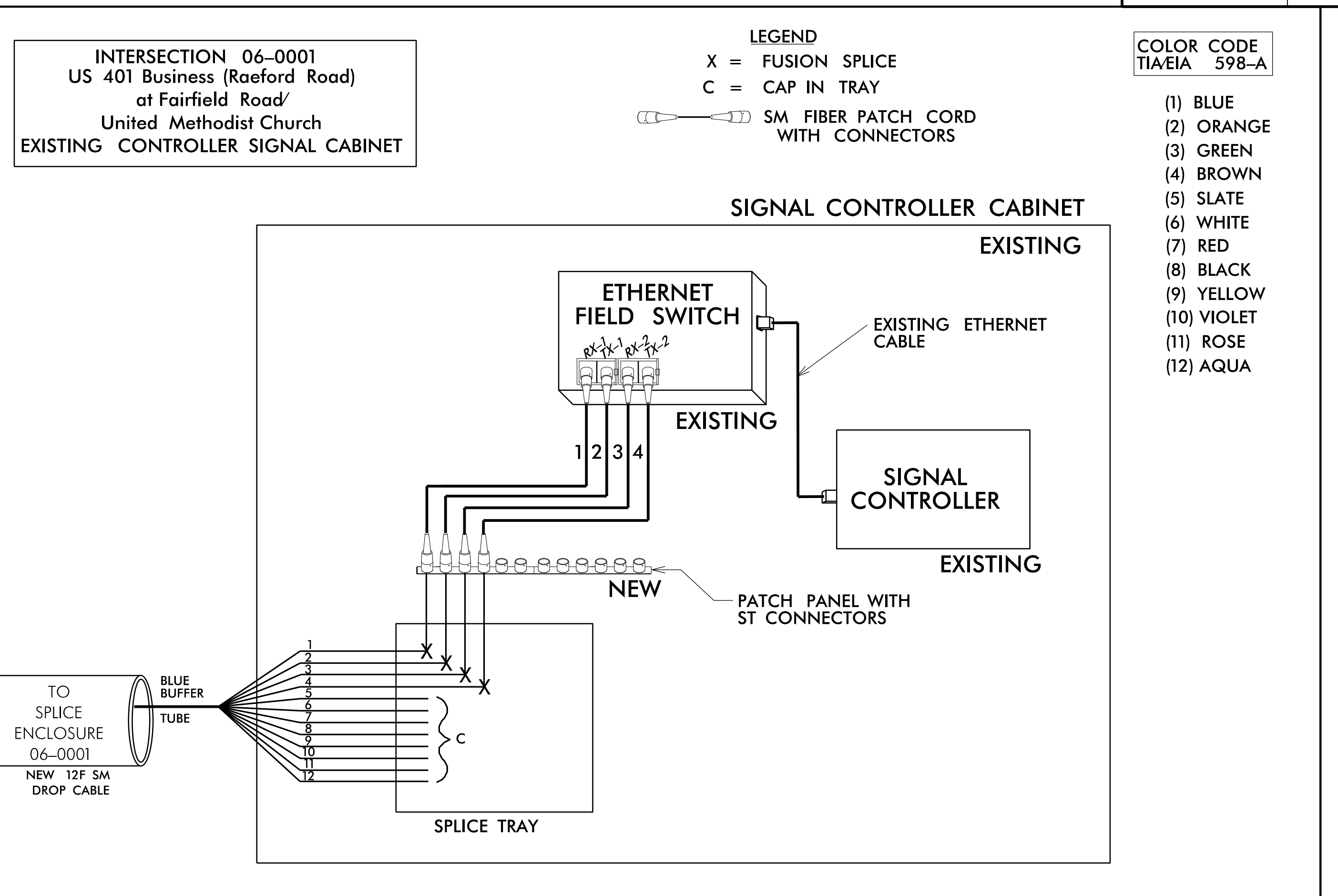
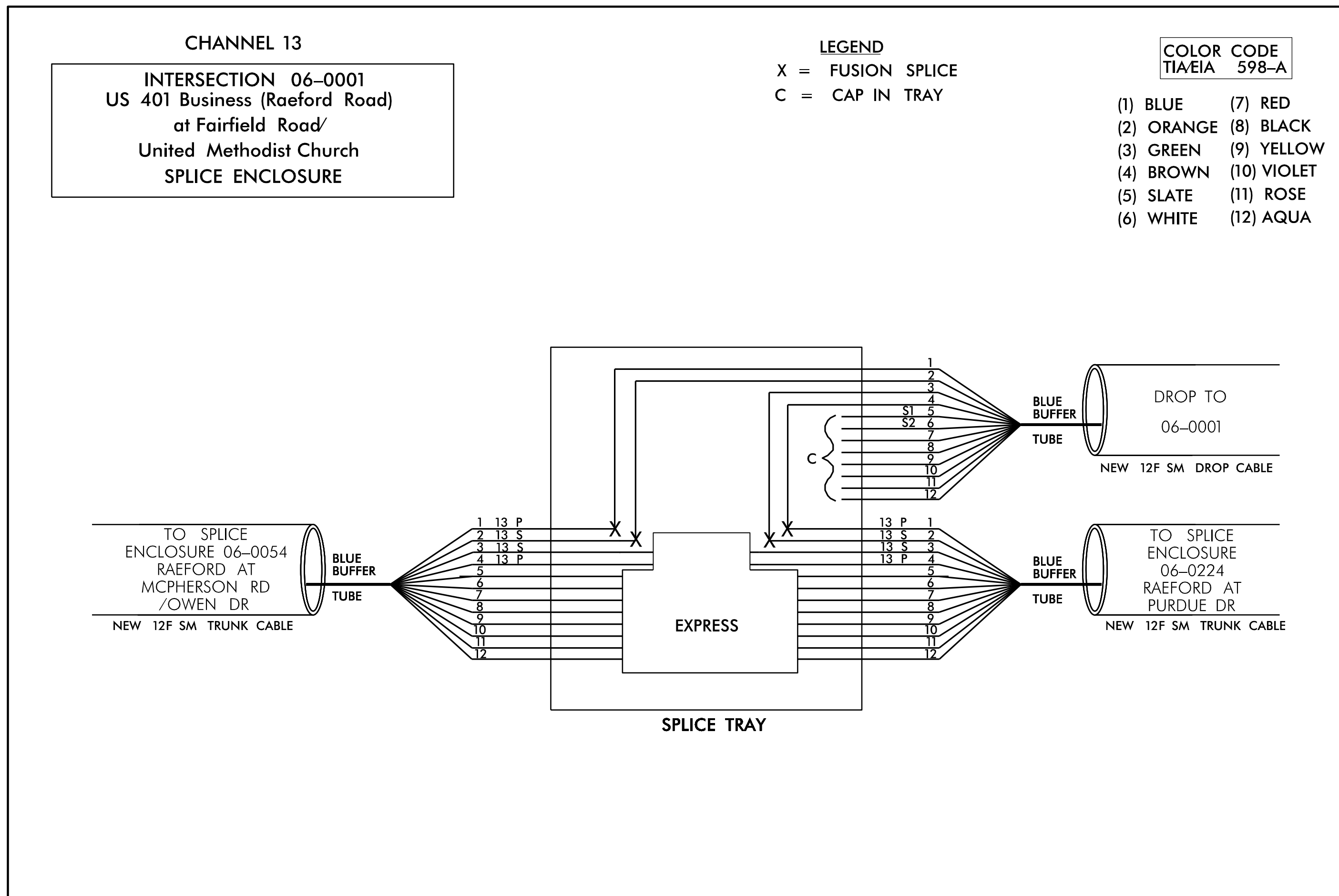


SPLICE CABINET (336)
INTERCONNECT CENTER
PATCH PANEL CONFIGURATION

FINAL

US 401 Business (Raeford Road)
at McPherson Church Road/Owen Drive

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>		<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0054 SPLICE CABINET No.3</p>		<p>SEAL LAWRENCE E. OWEN ENGINEER 045933</p>
		<p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>Prepared for the Offices of: </p>	
<p>SCALE N/A</p>	<p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>REVISIONS</p>	<p>INIT. DATE</p>	<p>DocuSigned by: Lawrence E Owen 3/29/2018 DATE</p>



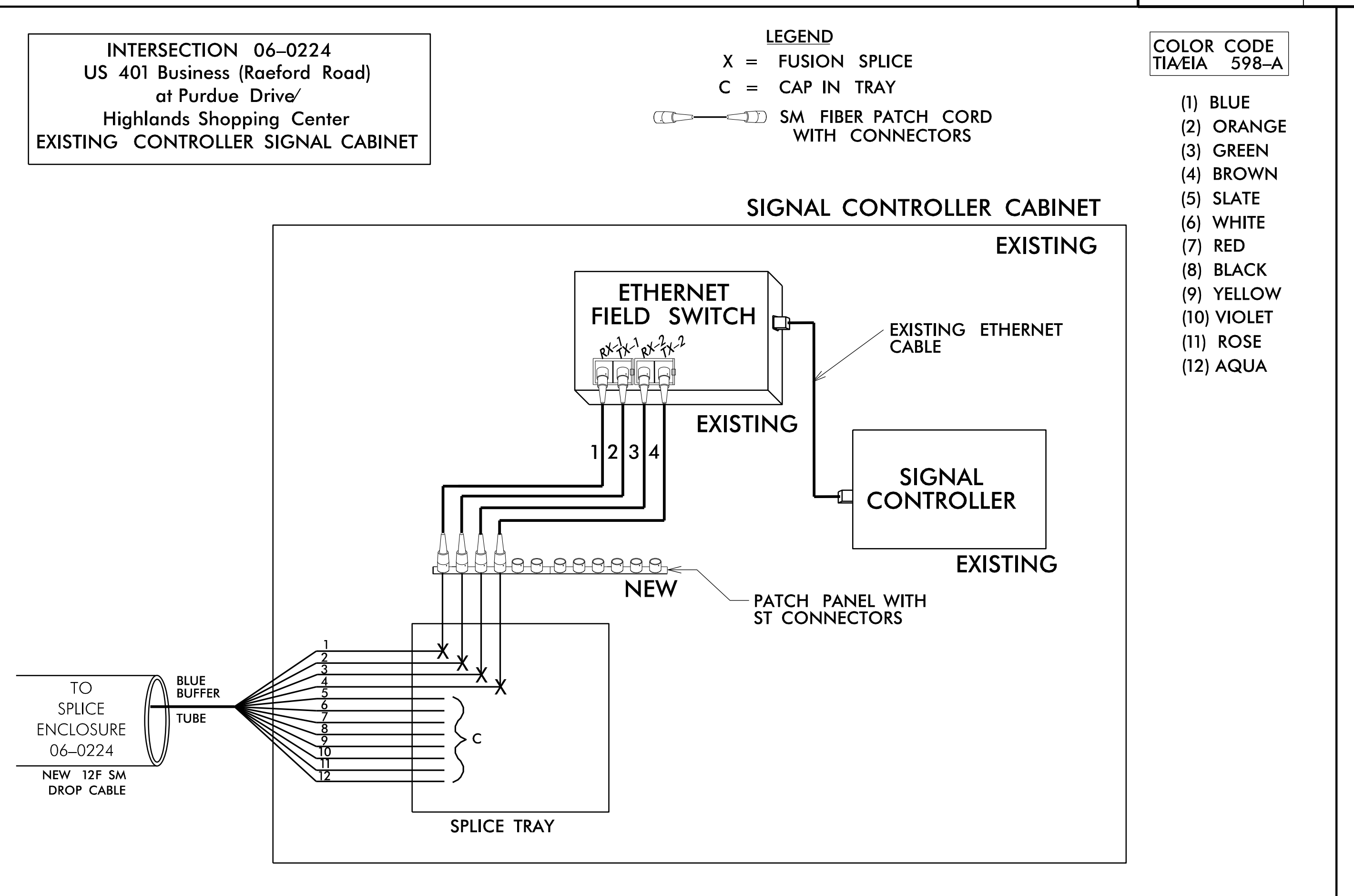
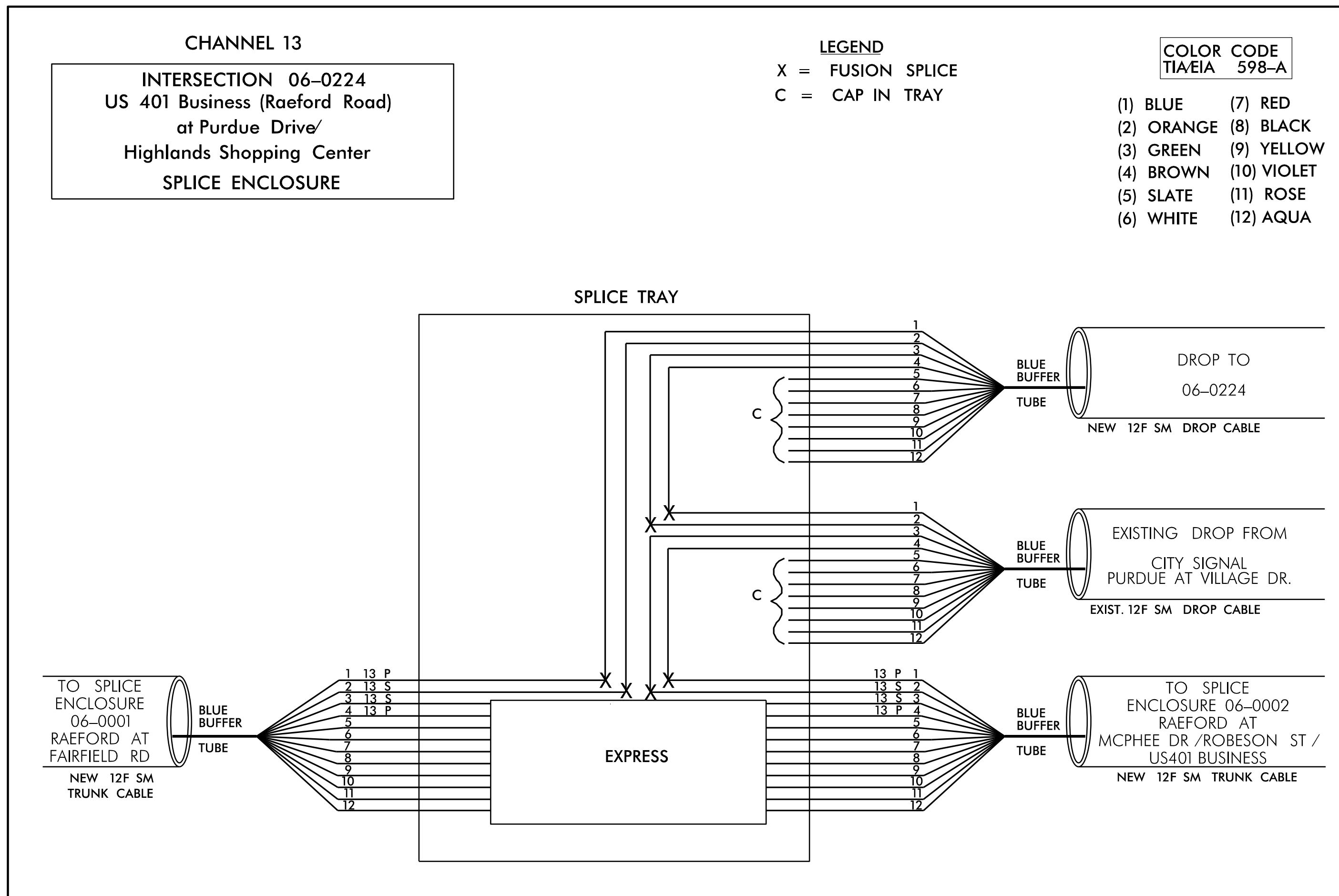
- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL MCCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:
- REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
- 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
 - 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
 - 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

FINAL

US 401 Business (Raeford Road)
at Fairfield Road/
United Methodist Church

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0001</p>		<p>SEAL LAWRENCE E. OWEN ENGINEER 045933</p>								
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>										
<p>SCALE: N/A</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DESCRIPTION	INIT.	DATE					<p>DocuSigned by: Lawrence E Owen 3/29/2018 DATE</p>
NO.	DESCRIPTION	INIT.	DATE									

3/27/2018 U:\171001766*Transportation*Traffic*Signal*Design*ITS U-4405*U-4405 Splicing SCP-20 - SCP-42.dgn j.ingram



- 1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
 - 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
 - 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.
- 2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

 - 1.) SPLICE LOCATION
 - 2.) DATE
 - 3.) COMPANY NAME
 - 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING

PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

US 401 Business (Raeford Road)
 at Purdue Drive/
 Highlands Shopping Center

FINAL

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Lawrence E. Owen 3/29/2018 DATE</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0224</p>	
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>	<p>SEAL 045933</p>
<p>PLAN DATE: MARCH 2018</p>	<p>REVIEWED BY: D. HARRIS</p>	<p>PREPARED BY: J. INGRAM</p>	<p>REVIEWED BY: B. WATSON</p>
<p>SCALE: N/A</p>	<p>REVISIONS</p>	<p>INIT.</p>	<p>DATE</p>

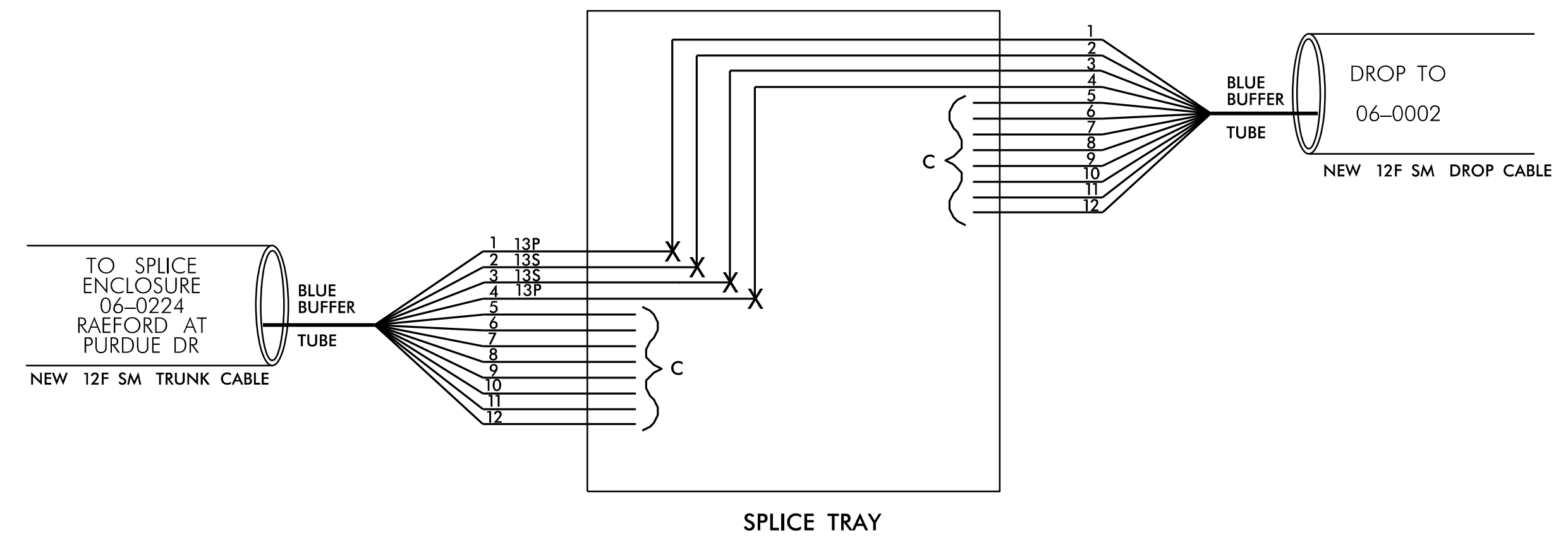
3/27/2018 U:\171001766*Transportation\on*des\gn*Traffic*Signal*Des\gn*ITS U-4405*U-4405 Fiber Splicing SCP-20 - SCP-42.dgn j.ingram

CHANNEL 13
INTERSECTION 06-0002
 US 401 Business (Raeford Road)
 at US 401 Business
 (Robeson Street)/McPhee Drive
 SPLICE ENCLOSURE

LEGEND
 X = FUSION SPLICE
 C = CAP IN TRAY

COLOR CODE
 TIA/EIA 598-A

(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA



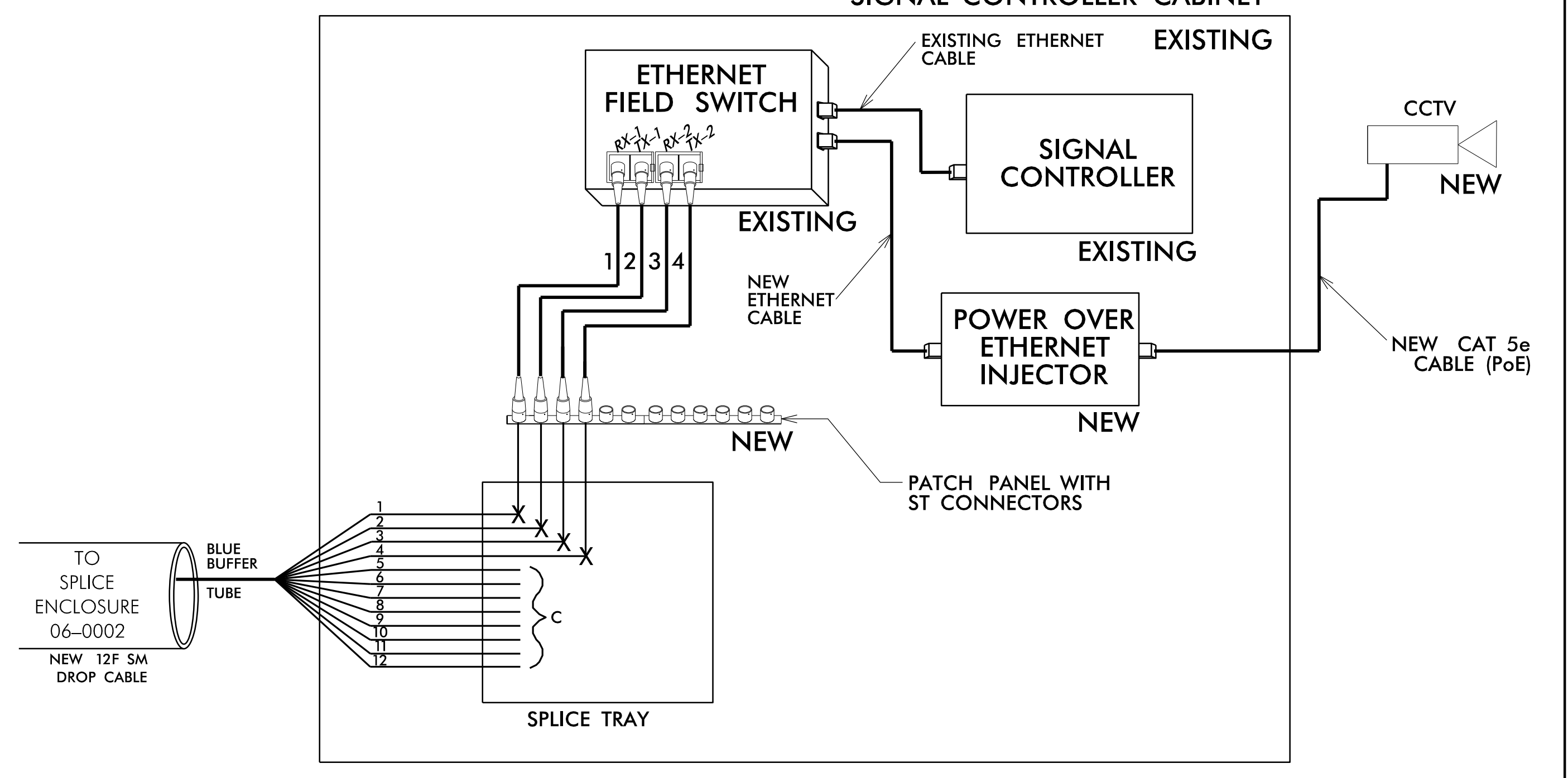
INTERSECTION 06-0002
 US 401 Business (Raeford Road)
 at US 401 Business
 (Robeson Street)/McPhee Drive
 EXISTING CONTROLLER SIGNAL CABINET

LEGEND
 X = FUSION SPLICE
 C = CAP IN TRAY

COLOR CODE
 TIA/EIA 598-A

(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

SM FIBER PATCH CORD WITH CONNECTORS



1) FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF FAYETTEVILLE'S, SIGNAL SYSTEMS MANAGEMENT ENGINEER, CARL McCARTNEY AT (910) 433-1660 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1.) THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION.
- 2.) NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY.
- 3.) WORK IS NOT COMPLETE UNTIL THE SYSTEM IS OPERATIONAL.

2) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:

REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"

- 1.) SPLICE LOCATION
- 2.) DATE
- 3.) COMPANY NAME
- 4.) NAME OF INDIVIDUAL PERFORMING THE SPLICING

PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

- 3) UNUSED FIBER SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 4) UNUSED BUFFER TUBES SHALL BE LEFT COILED AND STORED IN THE SPLICE TRAY.
- 5) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.

US 401 Business (Raeford Road)
 at US 401 Business
 (Robeson Street)/McPhee Drive

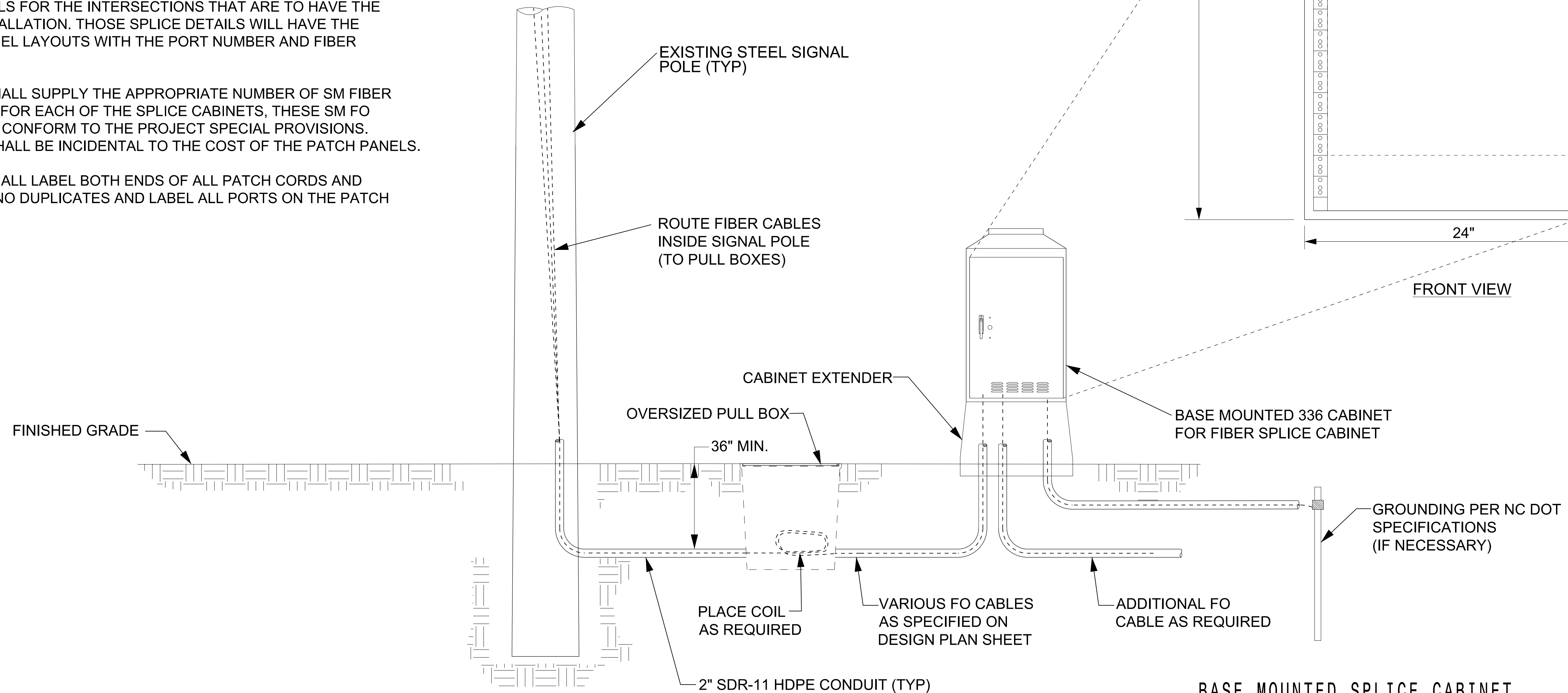
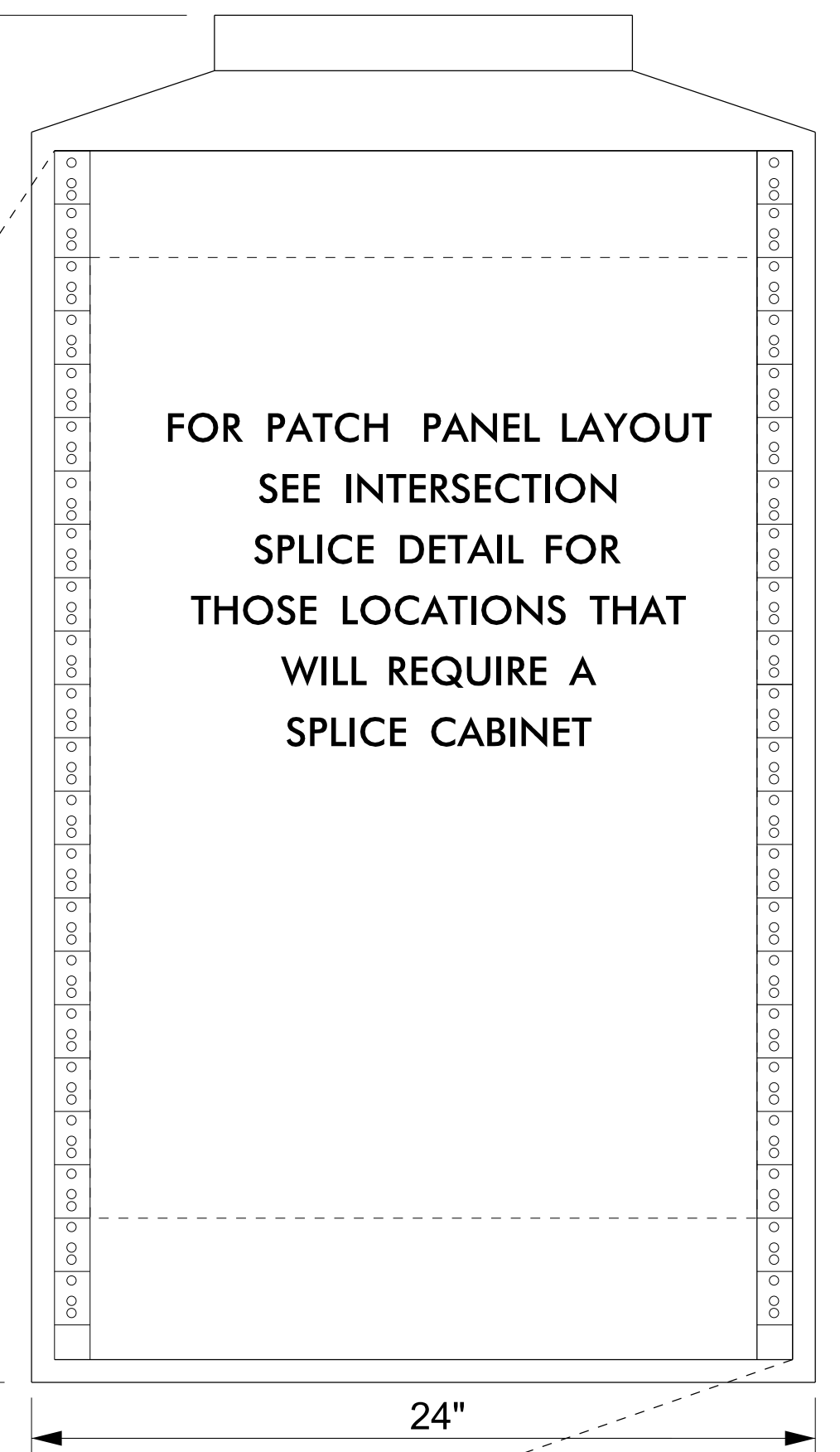
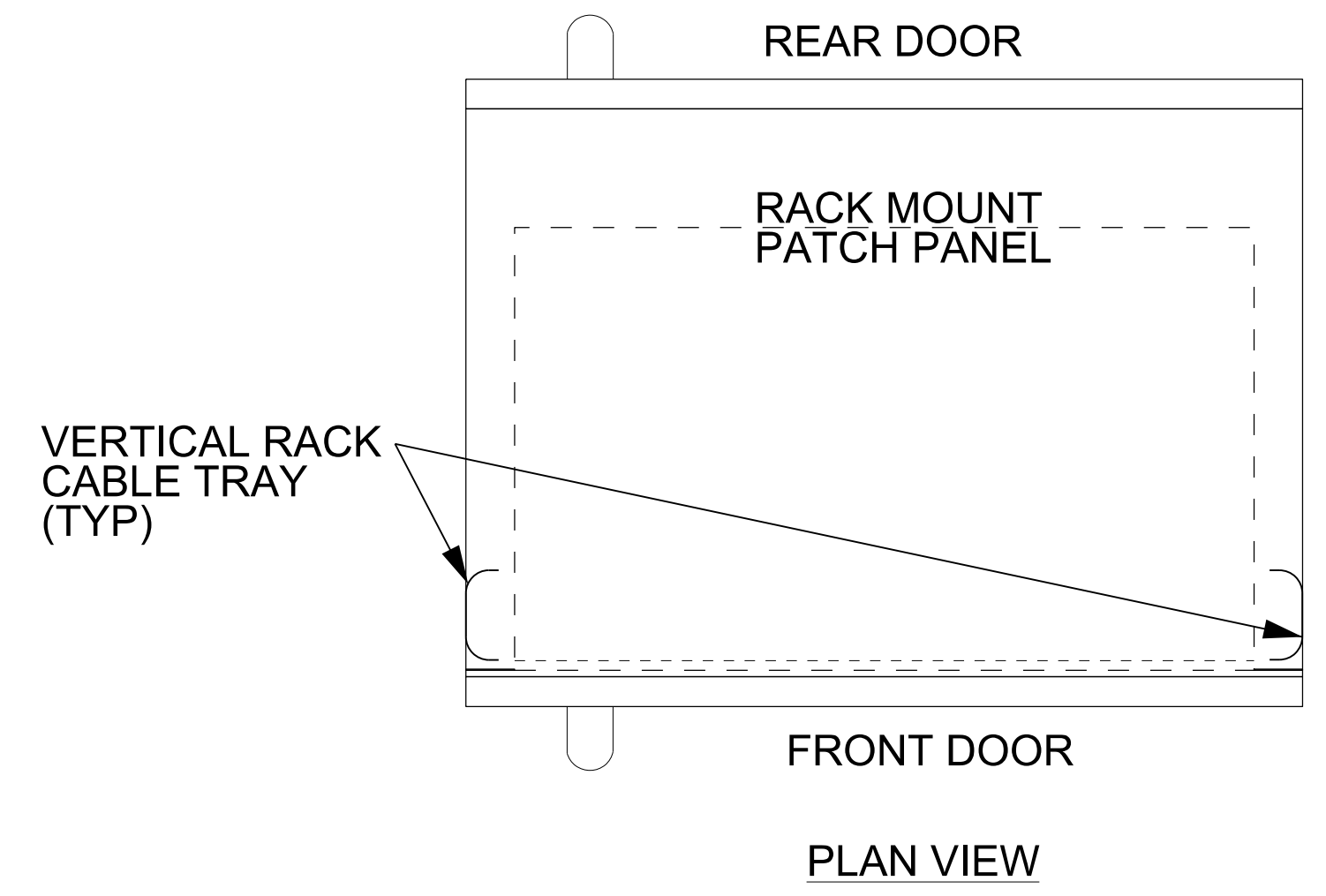
FINAL

<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS INTERSECTION 06-0002</p>		<p>SEAL LAWRENCE E. OVERMAN ENGINEER SEAL 045933</p>
		<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Place, Garner, NC 27529</p>	<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p> <p>SCALE: N/A</p>	

3/27/2018 U:\1710011766\Transportation\on*des.ign*des.ign*Traffic*U-4405_Splicing_SCP-20 - SCP-42.dgn j.ingram

NOTES:

1. THIS SPLICE CABINET SHALL CONSIST OF A STANDARD 336 CONTROLLER BASE MOUNTED CABINET WITH NCDOT STANDARD BASE EXTENDER. THE CONTRACTOR SHALL EQUIP THE SPLICE CABINET WITH NETWORK RAILS AS SHOWN. THE CABINET BASE EXTENDER AND NETWORK RAILS SHALL BE INCIDENTAL TO THE COST OF THE SPLICE CABINET. THE SPLICE CABINET WILL NOT HAVE A POWER CONNECTION AT THIS TIME.
2. THE FIBER OPTIC PATCH PANELS SHALL BE RACK MOUNTED AND SHALL INCORPORATE A HINGED DOOR. ALL PATCH PANELS SHALL COME PRE-LOADED WITH THE APPROPRIATE NUMBER OF SINGLE MODE FIBERS WITH SC CONNECTORS AT THE PANEL, AND THE CONTRACTOR SHALL SPLICE THESE FIBERS TO THE DROP CABLE.
3. NOT ALL OF THE REQUIRED BASE MOUNTED SPLICE CABINETS WILL HAVE THE SAME PATCH PANEL CONFIGURATION, THE CONTRACTOR SHALL REFER TO THE SPLICE DETAILS FOR THE INTERSECTIONS THAT ARE TO HAVE THE SPLICE CABINET INSTALLATION. THOSE SPLICE DETAILS WILL HAVE THE CORRECT PATCH PANEL LAYOUTS WITH THE PORT NUMBER AND FIBER CONNECTIONS.
4. THE CONTRACTOR SHALL SUPPLY THE APPROPRIATE NUMBER OF SM FIBER OPTIC PATCH CORDS FOR EACH OF THE SPLICE CABINETS, THESE SM FO PATCH CORDS SHALL CONFORM TO THE PROJECT SPECIAL PROVISIONS. THE PATCH CORDS SHALL BE INCIDENTAL TO THE COST OF THE PATCH PANELS.
5. THE CONTRACTOR SHALL LABEL BOTH ENDS OF ALL PATCH CORDS AND ENSURE THERE ARE NO DUPLICATES AND LABEL ALL PORTS ON THE PATCH PANELS.



TYPICAL BASE MOUNTED SPLICE CABINET
SCALE: NTS

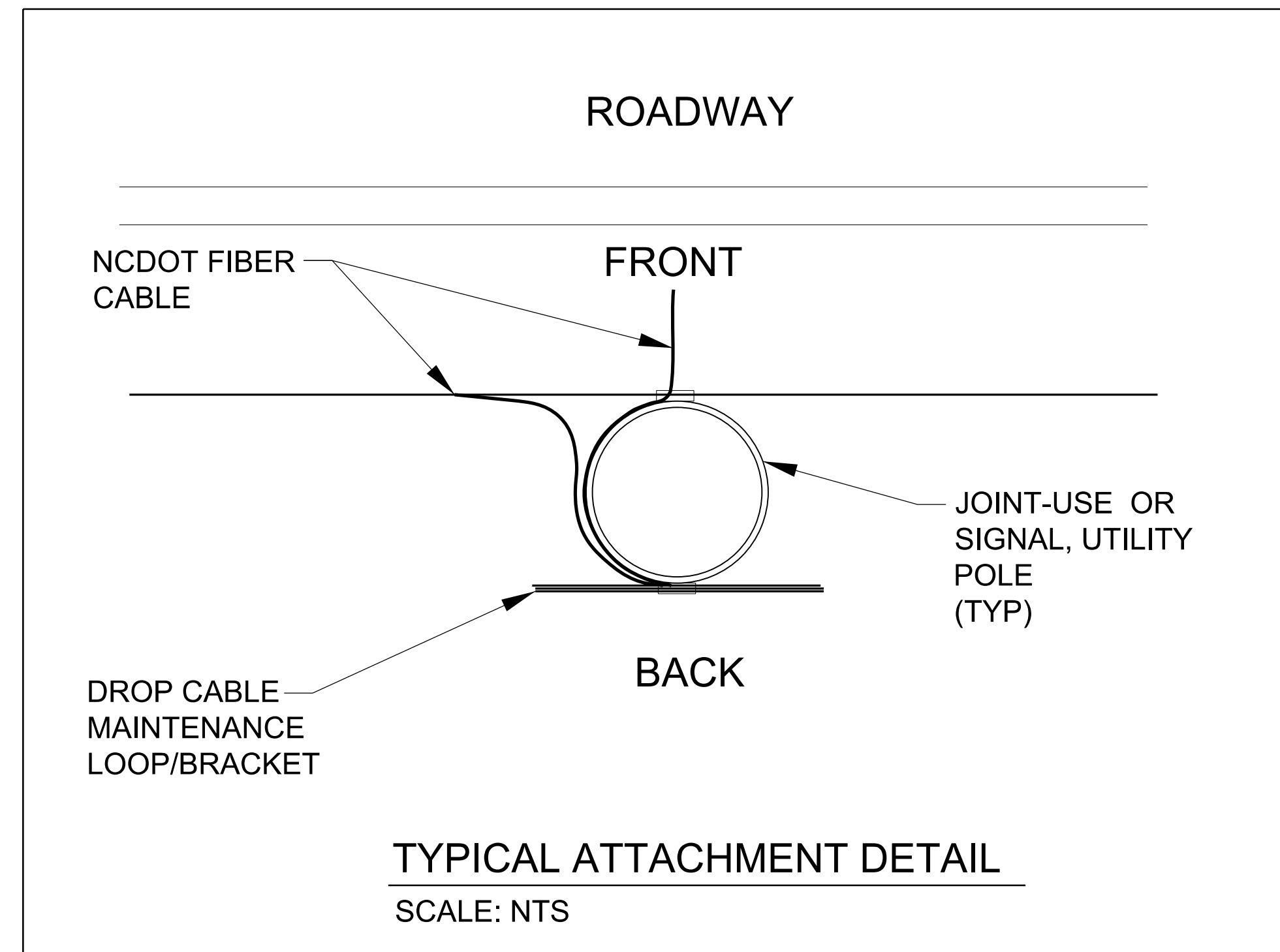
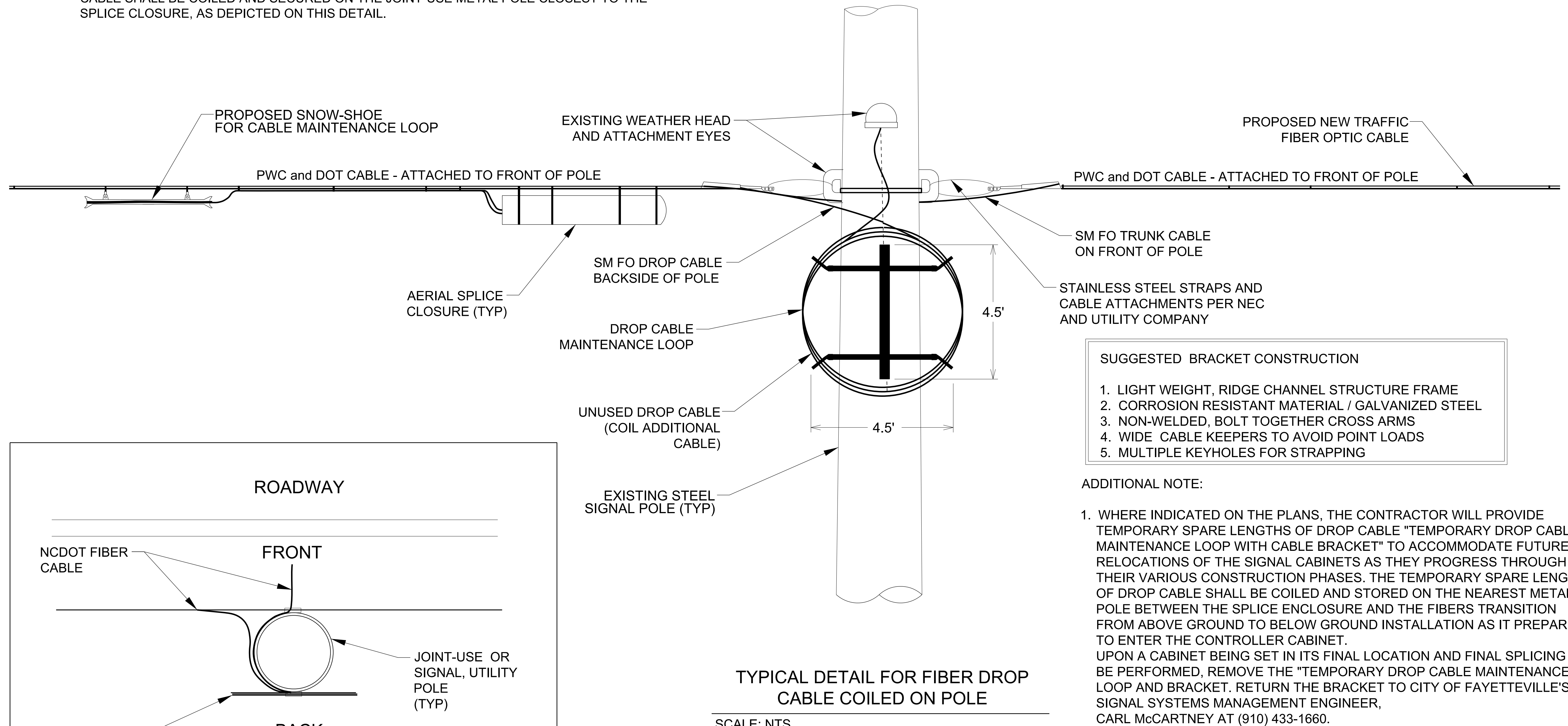
BASE MOUNTED SPLICE CABINET
FOR PATCH PANEL LAYOUT SEE SPLICE DETAILS

<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS SPLICE CABINET DETAIL</p>		<p>SEAL LAWRENCE E. OVERMAN ENGINEER 045933 DATE: 3/29/2018</p>					
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>							
		<p>PLAN DATE: MARCH 2018</p>	<p>REVIEWED BY: D. HARRIS</p>						
<p>PREPARED BY: J. INGRAM</p>	<p>REVIEWED BY: B. WATSON</p>	<table border="1"> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	INIT.	DATE				<p>SCALE: N/A</p>
REVISIONS	INIT.	DATE							

NOTES:

1. ALL AERIAL SPLICE CLOSURES SHALL BE INSTALLED OPPOSITE FIBER SHOW- SHOES FOR CABLE MAINTENANCE LOOP, PER NCDOT.
2. THE CONTRACTOR SHALL REFER TO SECTION "BACK PULL FIBER OPTIC CABLE" OF THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL INSTALL ENOUGH FIBER DROP CABLE TO ENSURE CONNECTION TO THE "FINAL" LOCATION OF THE SIGNAL CONTROL CABINET. THEREFORE, SINCE THE FINAL LOCATION MAY NOT HAVE BEEN DETERMINED BY THE TIME OF DROP CABLE INSTALLATION, THE CONTRACTOR SHALL INSTALL ENOUGH DROP CABLE FOR THE LONGEST RUN OF DROP CABLE TO THE FINAL "BUILD-OUT" LOCATION OF THE SIGNAL CONTROL CABINET. THE CONTRACTOR SHALL BE REQUIRED TO MAKE THE CONNECTION AT THE EXISTING SIGNAL CABINET, AND THEN ANY UNUSED FIBER DROP CABLE SHALL BE COILED AND SECURED ON THE JOINT-USE METAL POLE CLOSEST TO THE SPLICE CLOSURE, AS DEPICTED ON THIS DETAIL.

3. DUE TO THE AMOUNT OF TIME THAT THIS MAINTENANCE LOOP MIGHT REMAIN UNTIL THE FINAL INSTALLATION IS MADE, THE CONTRACTOR SHALL USE A BRACKET SIMILAR TO WHAT IS SHOWN ON THE DETAIL BELOW, STRAPPED TO THE STEEL POLE. THE COST OF THE BRACKET, BANDING, LABOR AND ALL ANCILLARY MATERIAL FOR INSTALLATION OF THE BRACKET SHALL BE INCIDENTAL TO THE COST OF THE DROP CABLE. EXPECTED HARDWARE SPECIFICS FOR THE BRACKET ARE BELOW.



TYPICAL DETAIL FOR FIBER DROP CABLE COILED ON POLE
SCALE: NTS

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>FIBER CABLE SPLICING DETAILS TEMP FIBER DROP CABLE BRACKET</p>		<p>SEAL</p>			
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE
REVISIONS	INIT.	DATE					

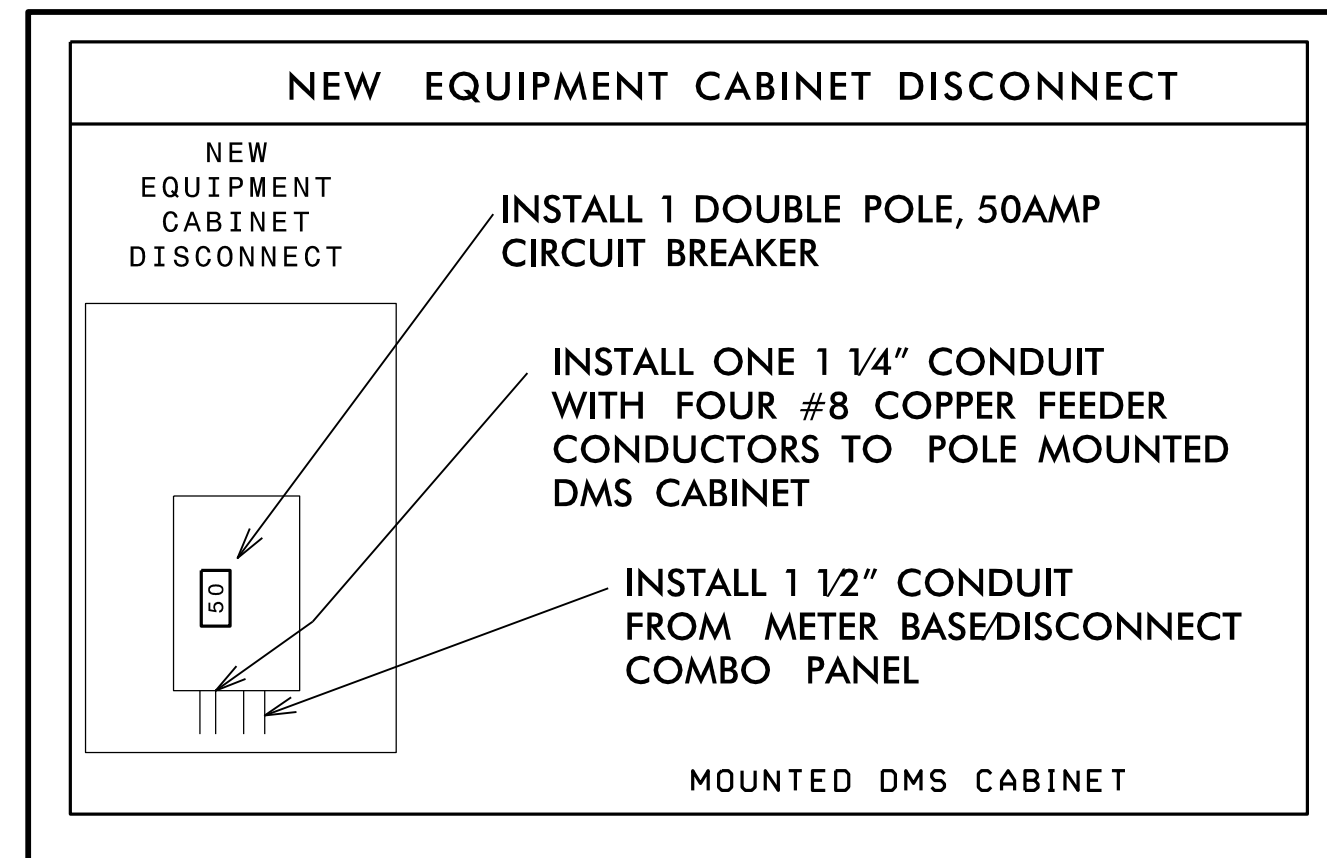
DocuSign Envelope ID: 2BE5C7FD-75F6-4A06-8B14-C860D7B3A9DE

Lawrence E. Overmire 3/29/2018

CADD Filename:

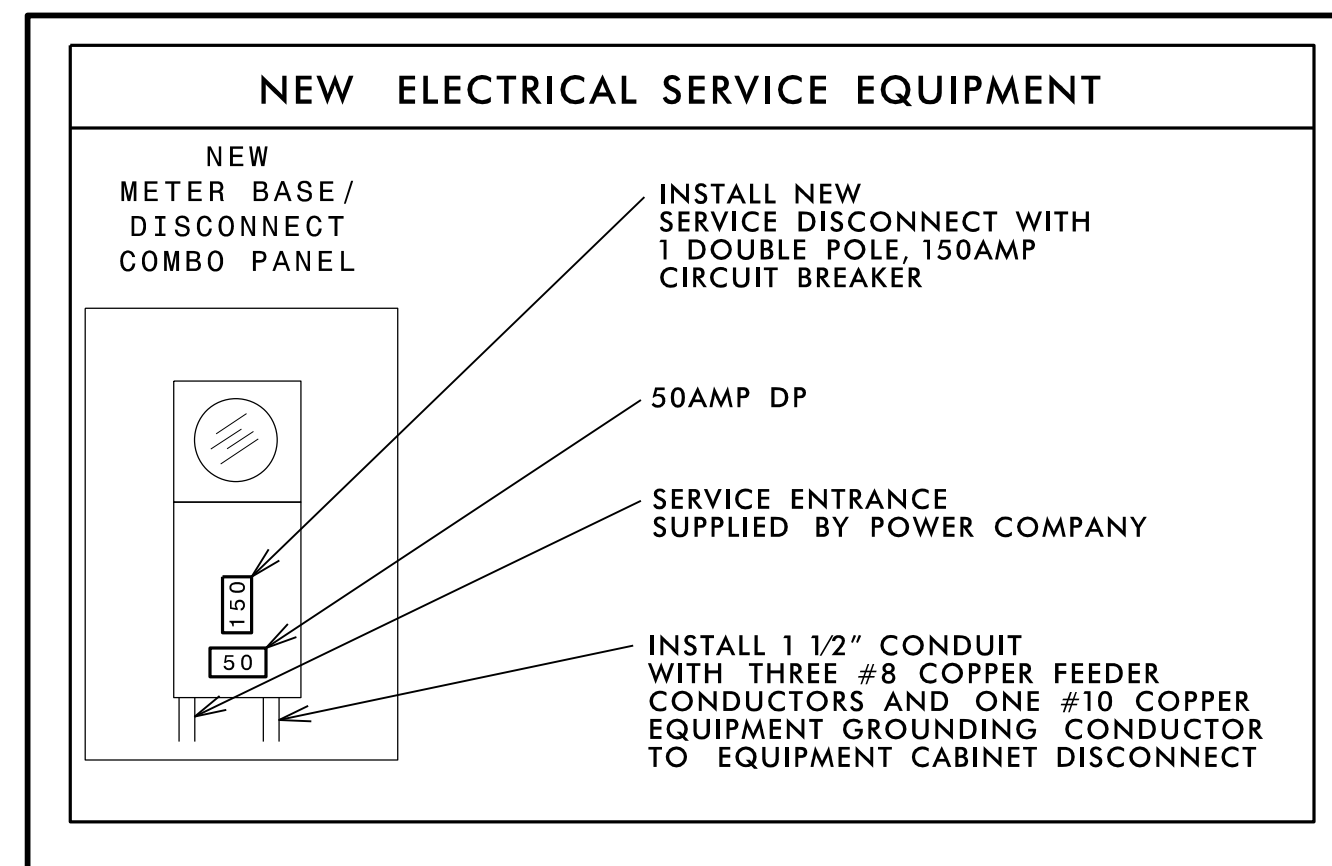
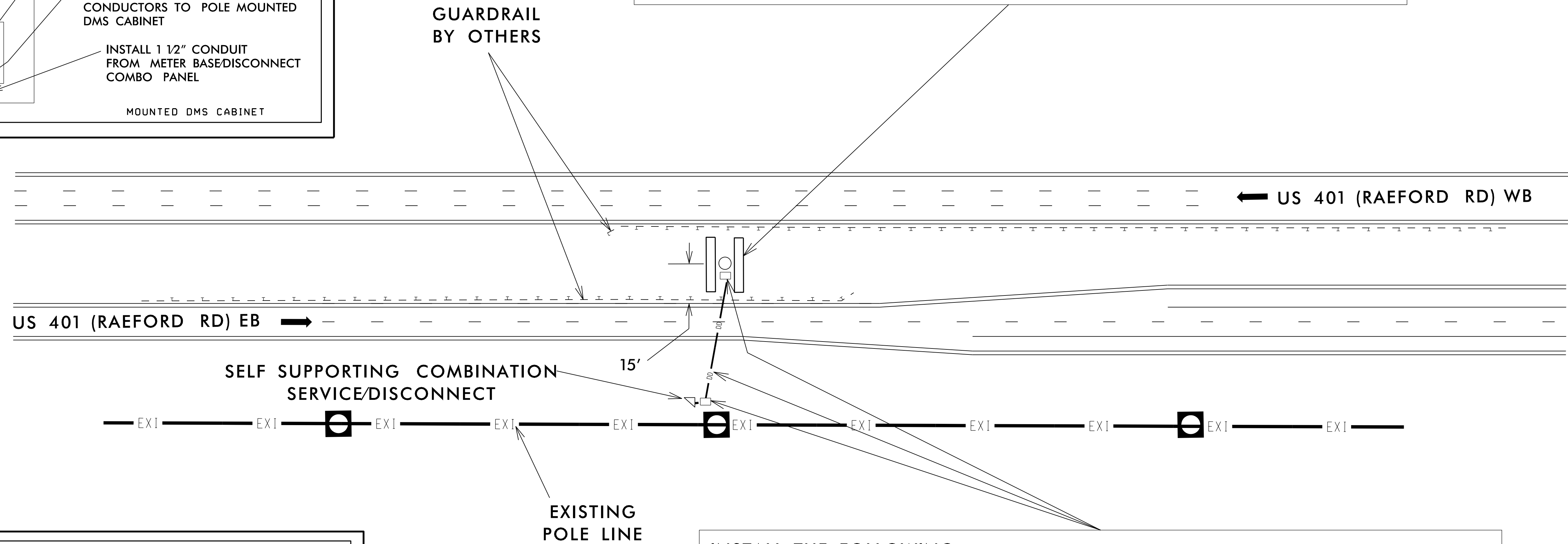
DMS-1 & 2

35° 2'13.89" N
79° 0'13.19" W



INSTALL THE FOLLOWING

QUANTITY	DESCRIPTION
2	DMS
1	STRUCTURE
1	FOUNDATION
1	EQUIPMENT CABINET DISCONNECT ON DMS STRUCTURE
3	5/8" x 10' COPPER CLAD GROUNDING ELECTRODE
30'	#4 AWG SOLID BARE COPPER GROUNDING CONDUCTOR



INSTALL THE FOLLOWING

QUANTITY	DESCRIPTION
1	METER BASE/DISCONNECT COMBINATION PANEL
60'	DIRECTIONAL DRILL (2)(1 1/2")
2	STANDARD SIZE JUNCTION BOX
80'	3-WIRE COPPER FEEDER CONDUCTORS
3	5/8" x 10' COPPER CLAD GROUNDING ELECTRODE
30'	#4 AWG SOLID BARE COPPER GROUNDING CONDUCTOR

NOTES:

1. INSTALL NEW DMS POLE MOUNTED CABINET (1) ON NEW DMS STRUCTURE.
2. INSTALL NEW GROUNDING SYSTEM AS SHOWN ON SHEET SCP-47 AND AS DESCRIBED IN THE PROJECT SPECIAL PROVISIONS.

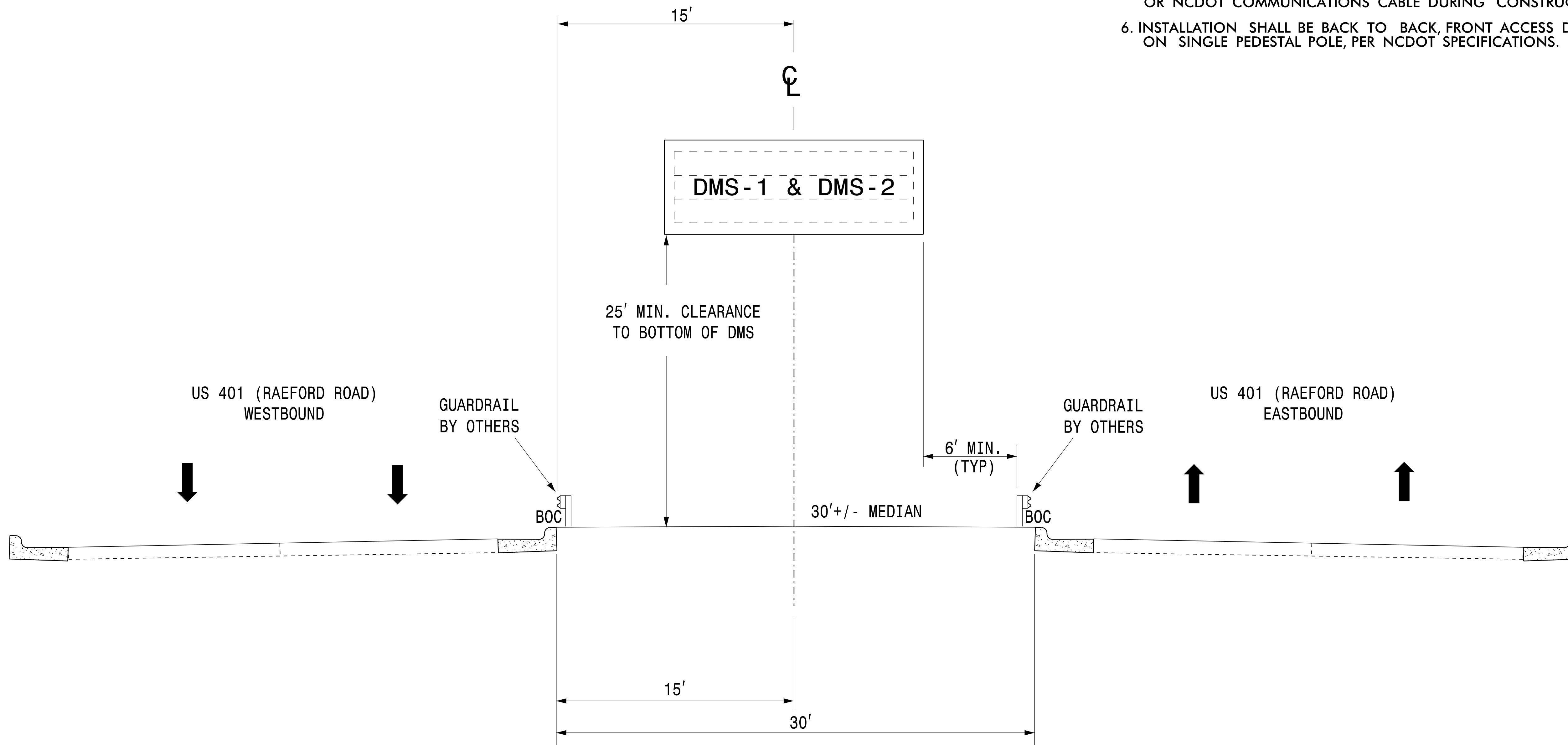
WEST OF 71ST SCHOOL ROAD/GRAHAM ROAD

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>DMS 1 & DMS 2 INSTALLATION (DAUL-MOUNTED on SINGLE POLE PEDESTAL)</p>		<p>SEAL NORTH CAROLINA PROFESSIONAL ENGINEER 045933 LAWRENCE E. OVERBY</p>	
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> </tr> </table>		INIT.
INIT.	DATE				
<p>SCALE: N/A</p>		<p>DocuSigned by: Lauren E. Overby 3/29/2018 DATE</p> <p>CADD Filename:</p>			

ESTIMATED DIMENSION : 15' X 8' (EACH)
 MAXIMUM DEADLOAD OF 1500 LBS (EACH)

NOTES:

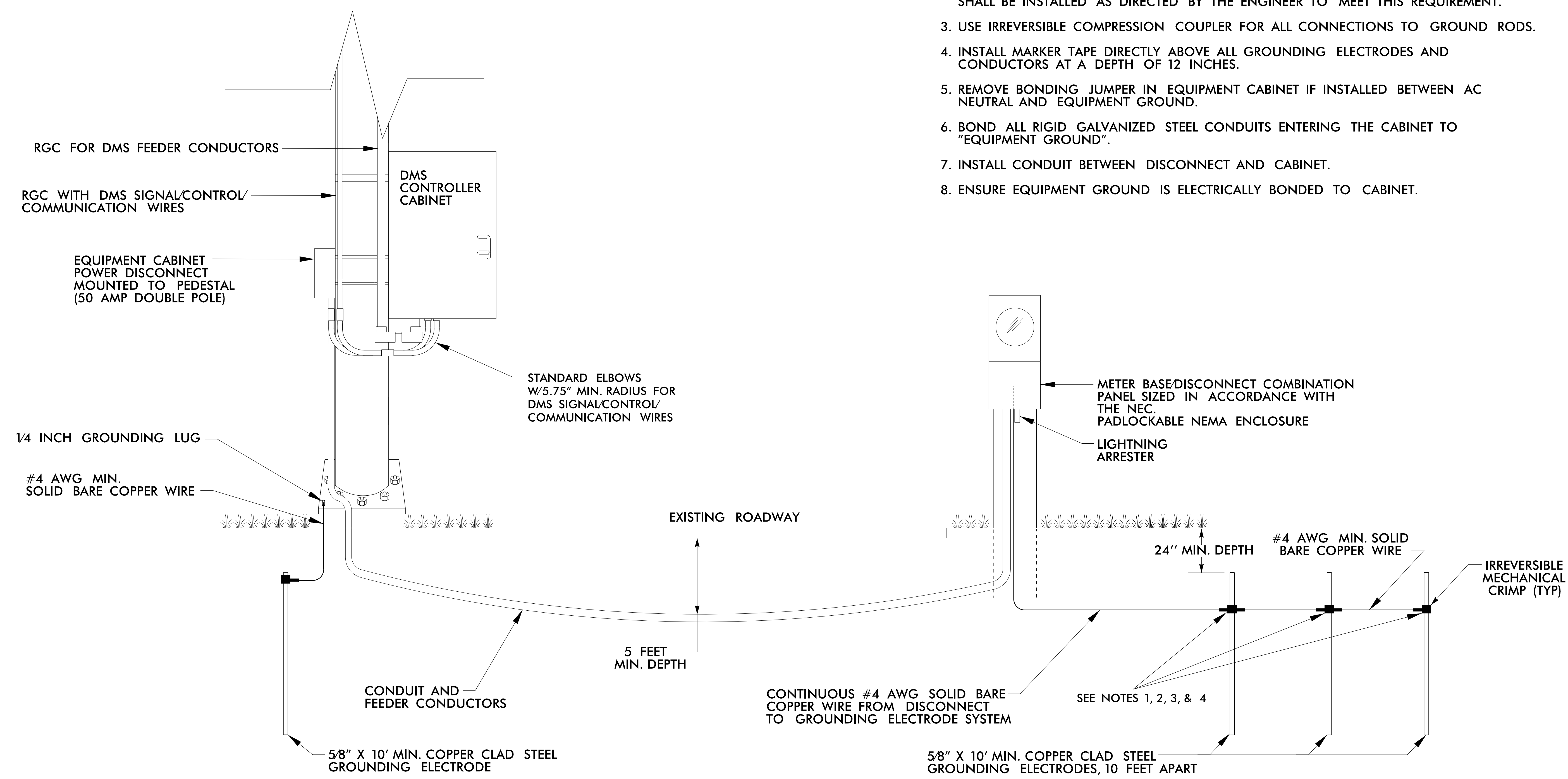
1. USE THE ACTUAL DIMENSIONS AND WEIGHT OF THE DMS PROVIDED BY THE DMS FABRICATOR TO COMPLETE THE DESIGN OF THE DMS STRUCTURE.
2. FIELD VERIFY ALL FOOTING ELEVATIONS AND GROUND SLOPES AT THE FOOTINGS USING THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
3. ENSURE THAT THE TOP OF THE FOOTING EXTENDS AT LEAST 6 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
4. DESIGN AND CONSTRUCT THE PEDESTAL STRUCTURE AND DMS ENCLOSURE TO WITHSTAND WIND VELOCITIES OF 140 MPH.
5. VERIFY ALL UNDERGROUND UTILITY LOCATIONS BEFORE BEGINNING ANY UNDERGROUND WORK. DO NOT DAMAGE ANY EXISTING UTILITIES OR NCDOT COMMUNICATIONS CABLE DURING CONSTRUCTION.
6. INSTALLATION SHALL BE BACK TO BACK, FRONT ACCESS DMS ON SINGLE PEDESTAL POLE, PER NCDOT SPECIFICATIONS.



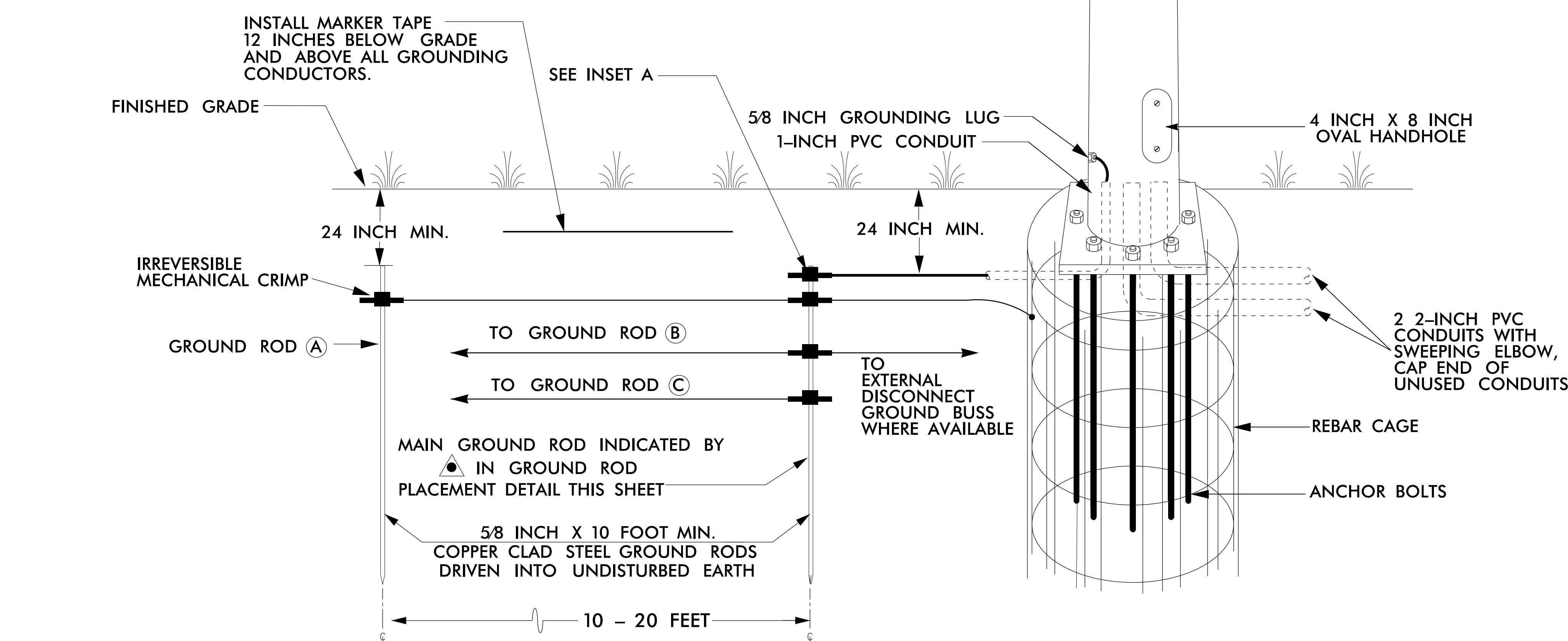
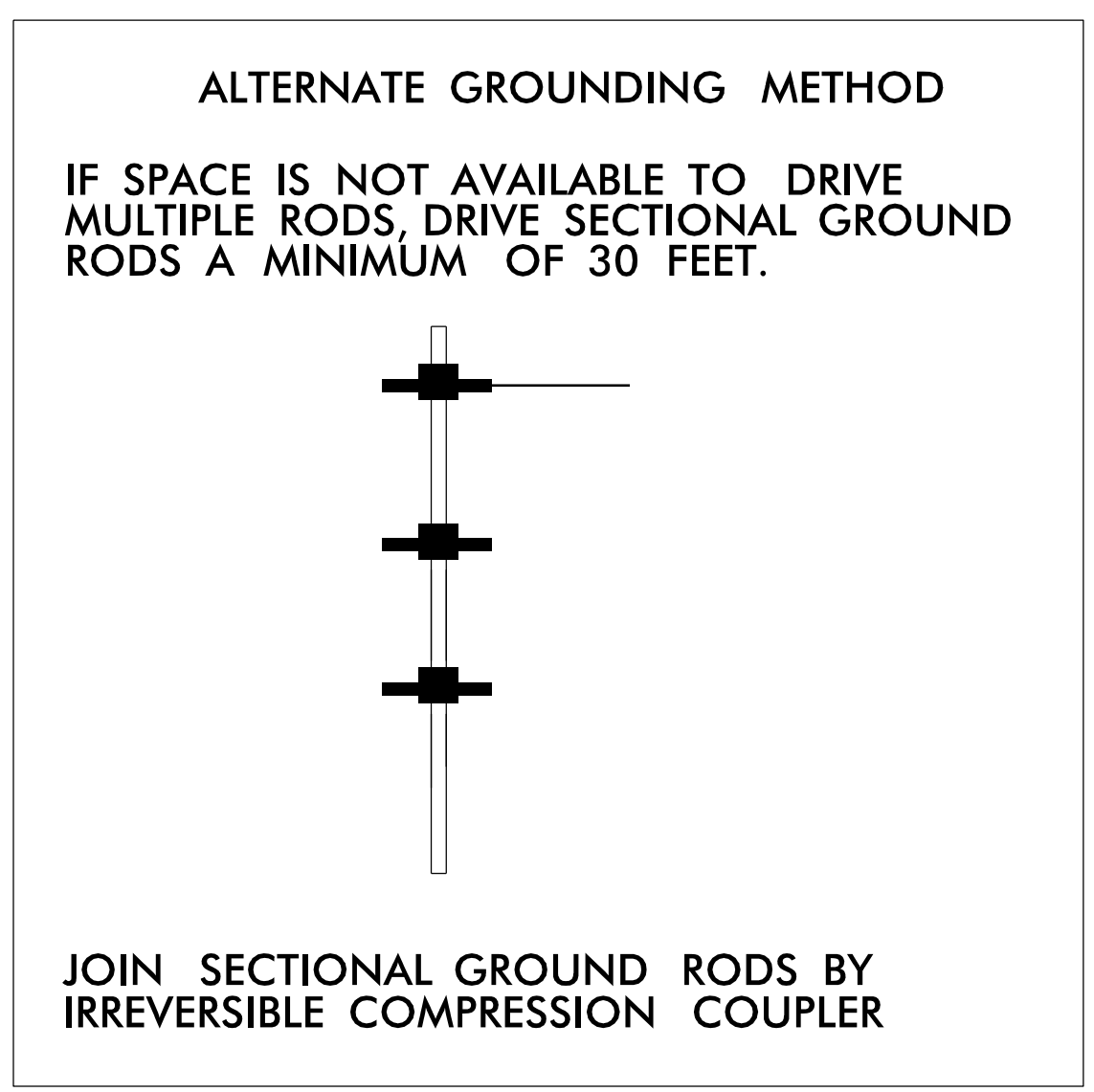
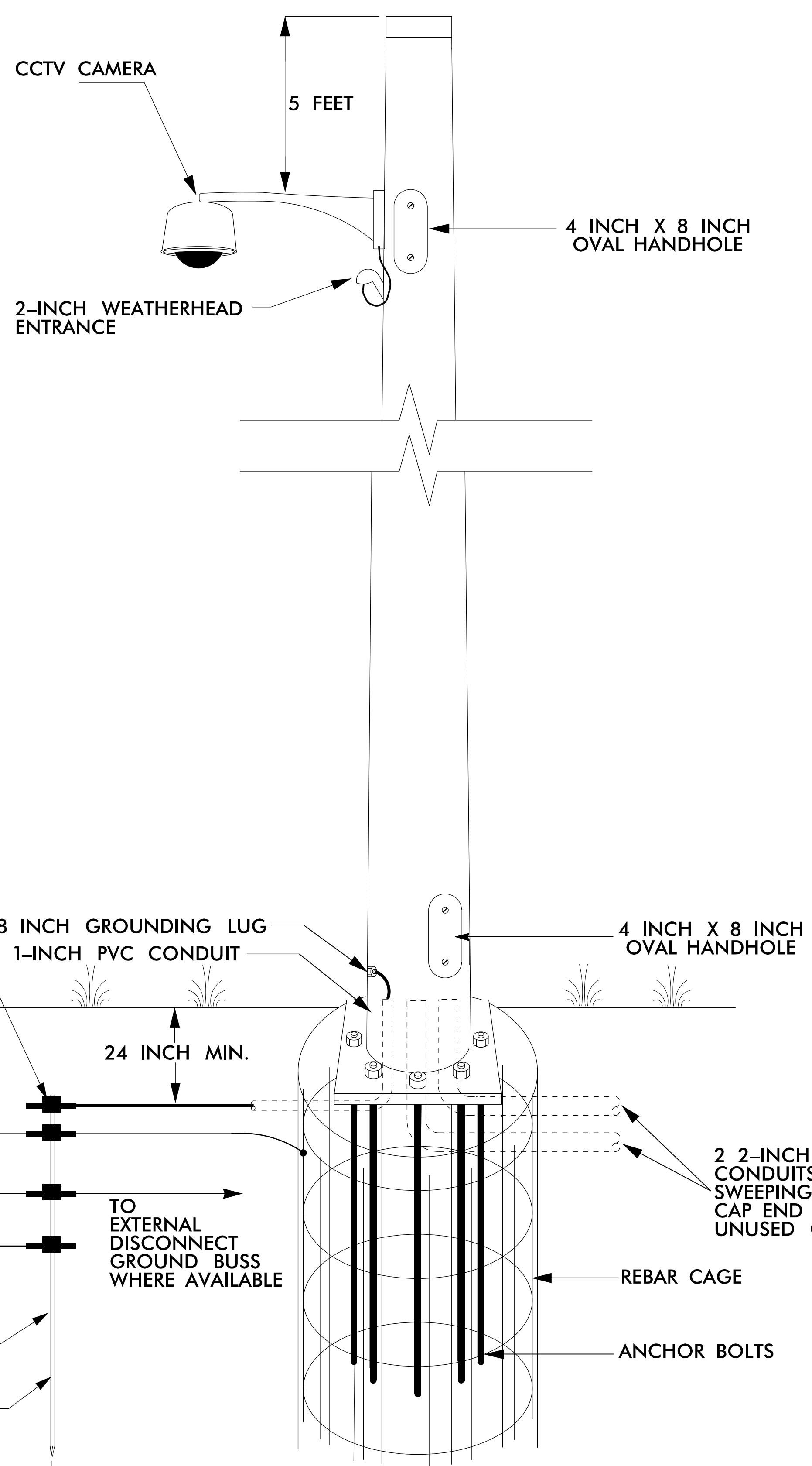
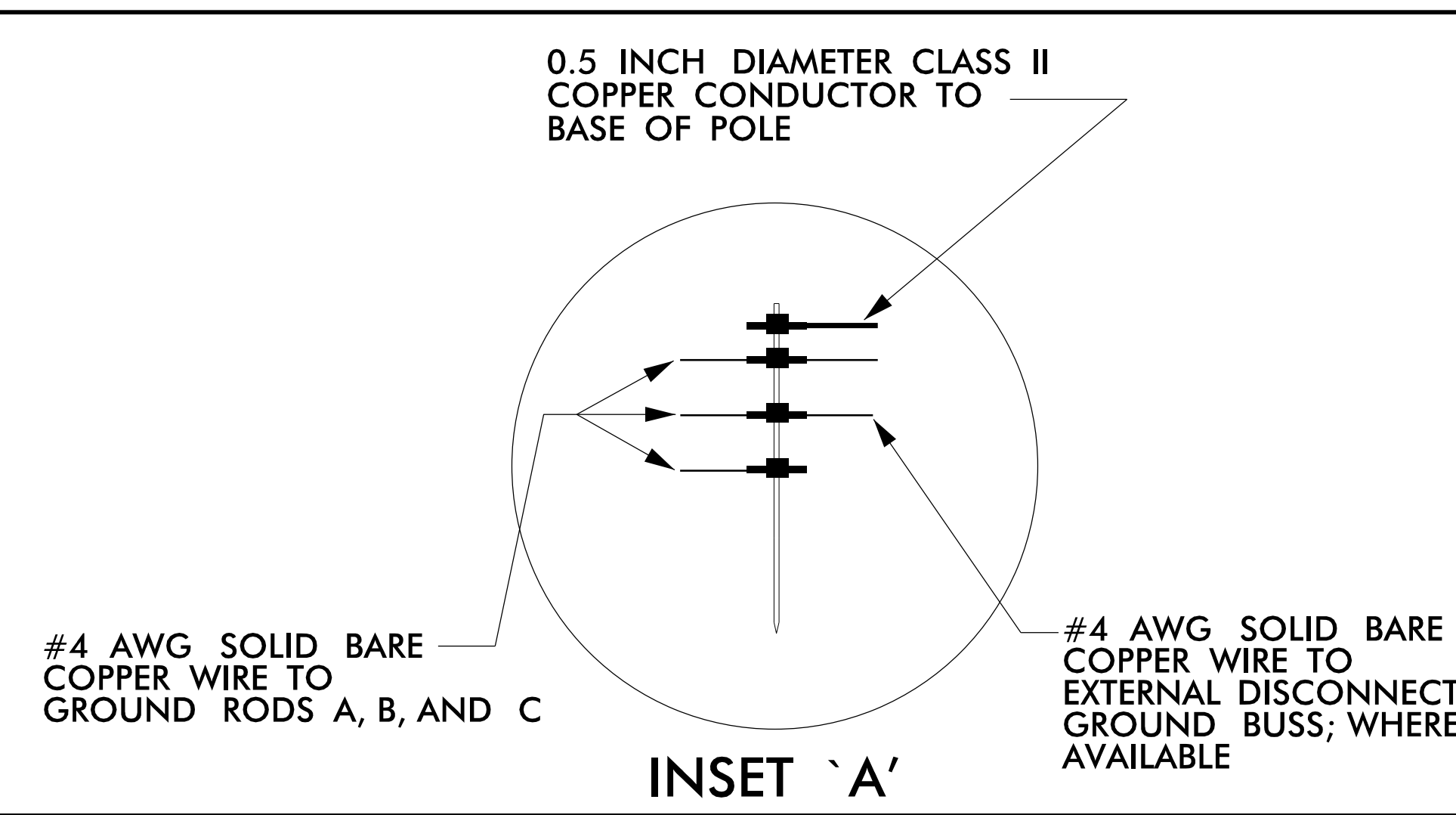
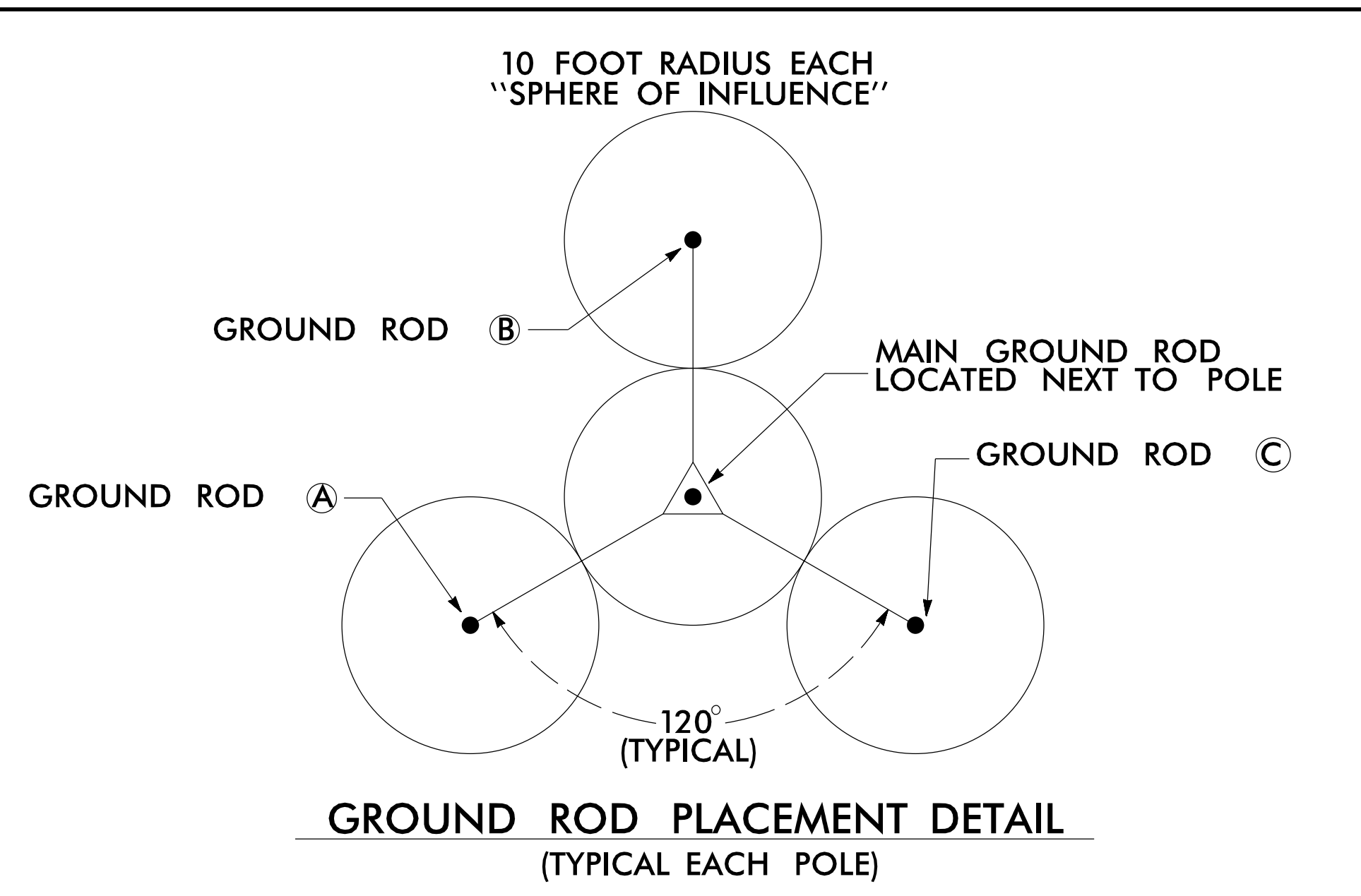
<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>DMS 1 & DMS 2 INSTALLATION (DAUL-MOUNTED on SINGLE POLE PEDESTAL)</p>		<p>SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045933 LAWRENCE E. OVERTON</p>
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p>	<p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p>	
<p>SCALE: N/A</p>		<p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>REVISIONS: INIT. DATE</p>	<p>DocuSigned by: Lawrence E. Overton 3/29/2018 CADD Filename:</p>

NOTES

1. INSTALL A MINIMUM OF THREE (3) GROUNDING ELECTRODES SPACED A MINIMUM OF 10 FEET APART. ENSURE THAT EXISTING UNDERGROUND FACILITIES ARE NOT DAMAGED DURING INSTALLATION.
2. TEST GROUNDING SYSTEM USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE TWENTY (20) OHMS OR LESS. ADDITIONAL GROUNDING ELECTRODES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER TO MEET THIS REQUIREMENT.
3. USE IRREVERSIBLE COMPRESSION COUPLER FOR ALL CONNECTIONS TO GROUND RODS.
4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
5. REMOVE BONDING JUMPER IN EQUIPMENT CABINET IF INSTALLED BETWEEN AC NEUTRAL AND EQUIPMENT GROUND.
6. BOND ALL RIGID GALVANIZED STEEL CONDUITS ENTERING THE CABINET TO "EQUIPMENT GROUND".
7. INSTALL CONDUIT BETWEEN DISCONNECT AND CABINET.
8. ENSURE EQUIPMENT GROUND IS ELECTRICALLY BONDED TO CABINET.



<p>Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>DMS 1 & DMS 2 NEW ELECTRICAL SERVICE AND GROUNDING DETAIL</p>		<p>SEAL NORTH CAROLINA JAMES E. OVERTON ENGINEER SEAL 045933</p>					
		<p>DIVISION 06 CUMBERLAND CO. FAYETTEVILLE</p> <p>PLAN DATE: MARCH 2018 REVIEWED BY: D. HARRIS</p> <p>PREPARED BY: J. INGRAM REVIEWED BY: B. WATSON</p>	<p>SCALE N/A</p>		<table border="1"> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	INIT.	DATE	
REVISIONS	INIT.	DATE							



NOTES

1. BOND 0.5 INCH DIAMETER, 28 STRAND (MINIMUM) CLASS II COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN IRREVERSIBLE MECHANICAL CRIMP METHOD.
2. ALL CONNECTIONS TO GROUND RODS SHOULD BE MADE WITH AN IRREVERSIBLE MECHANICAL CRIMP METHOD.
3. BOND #4 AWG SOLID BARE COPPER WIRE TO REBAR CAGE AND THE MAIN GROUND ROD BY AN IRREVERSIBLE MECHANICAL CRIMP.
4. ENSURE CAMERA HOUSING, CAMERA, AND PAN -TILT UNIT ARE BONDED TO POLE.
5. THE CONTRACTOR MAY, UPON APPROVAL OF THE ENGINEER, INSTALL A 30-FOOT SECTIONAL GROUND ROD WHEN CONDITIONS WILL NOT ALLOW FOR THE INSTALLATION OF THE 3 - RADIAL GROUND RODS.
6. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.

	CCTV CAMERA INSTALLATION FOR METAL POLE TYPICAL DETAIL		SEAL
	PLAN DATE: MARCH 2018 PREPARED BY: J. INGRAM	REVIEWED BY: D. HARRIS REVIEWED BY: B. WATSON	
DocuSigned by: <i>Lawrence E. Overton</i> 3/29/2018 SIGNATURE DATE CADD Filename:			