

**LEGEND**

- 144-STRAND SMFO
- - 24-STRAND SMFO

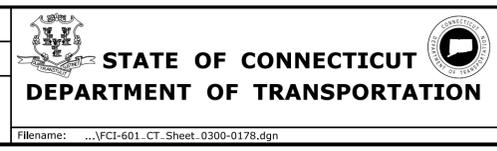
**NOTES:**

1. DIAGRAM DEPICTS OVERALL PHYSICAL NETWORK BACKBONE FIBER LAYOUT. REFER TO DWG. FCI-602 FOR PHASE 2 FIBER DETAILS AND FCI-605 FOR LOGICAL NETWORK DIAGRAM AND ADDITIONAL DETAILS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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PROJECT TITLE:  
**NETWORK INFRASTRUCTURE  
UPGRADE FOR SECURITY  
NEW HAVEN LINE  
PHASE 2**

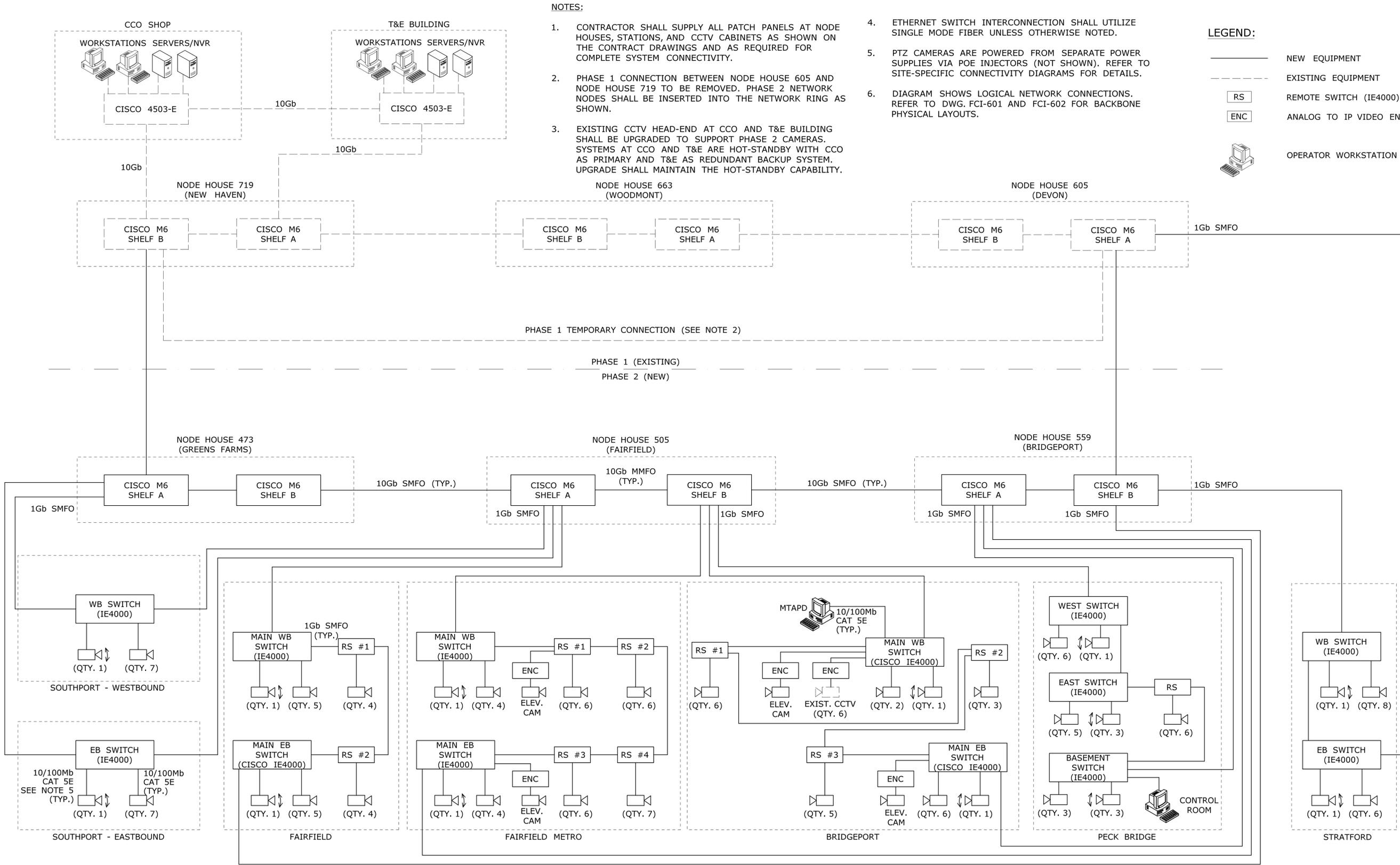
TOWN:  
**WESTPORT  
TO STRATFORD**  
DRAWING TITLE:  
**BACKBONE FIBER  
DIAGRAM**

PROJECT NO.  
**300-0178**  
DRAWING NO.  
**FCI-601**  
SHEET NO.  
**06.02**

Plotted Date: 3/31/2016

Filename: ...FCI-601\_CT\_Sheet\_0300-0178.dgn





**NOTES:**

1. CONTRACTOR SHALL SUPPLY ALL PATCH PANELS AT NODE HOUSES, STATIONS, AND CCTV CABINETS AS SHOWN ON THE CONTRACT DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEM CONNECTIVITY.
2. PHASE 1 CONNECTION BETWEEN NODE HOUSE 605 AND NODE HOUSE 719 TO BE REMOVED. PHASE 2 NETWORK NODES SHALL BE INSERTED INTO THE NETWORK RING AS SHOWN.
3. EXISTING CCTV HEAD-END AT CCO AND T&E BUILDING SHALL BE UPGRADED TO SUPPORT PHASE 2 CAMERAS. SYSTEMS AT CCO AND T&E ARE HOT-STANDBY WITH CCO AS PRIMARY AND T&E AS REDUNDANT BACKUP SYSTEM. UPGRADE SHALL MAINTAIN THE HOT-STANDBY CAPABILITY.

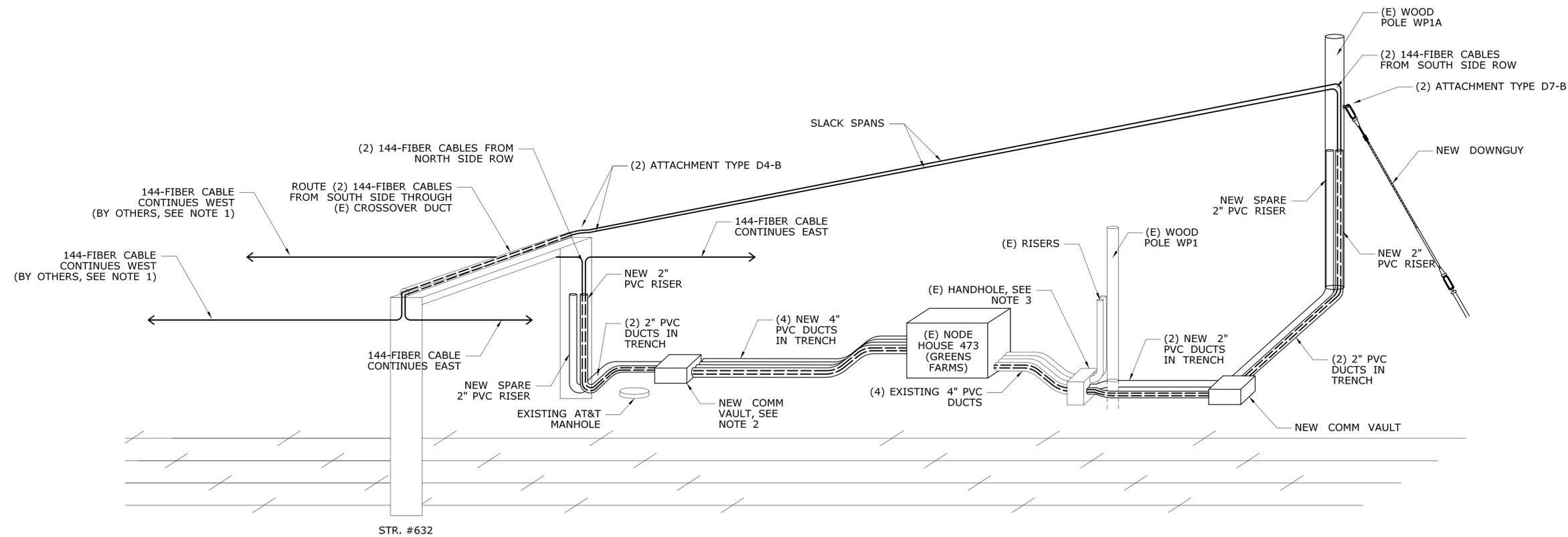
4. ETHERNET SWITCH INTERCONNECTION SHALL UTILIZE SINGLE MODE FIBER UNLESS OTHERWISE NOTED.
5. PTZ CAMERAS ARE POWERED FROM SEPARATE POWER SUPPLIES VIA POE INJECTORS (NOT SHOWN). REFER TO SITE-SPECIFIC CONNECTIVITY DIAGRAMS FOR DETAILS.
6. DIAGRAM SHOWS LOGICAL NETWORK CONNECTIONS. REFER TO DWG. FCI-601 AND FCI-602 FOR BACKBONE PHYSICAL LAYOUTS.

**LEGEND:**

- NEW EQUIPMENT
- EXISTING EQUIPMENT
- REMOTE SWITCH (IE4000)
- ANALOG TO IP VIDEO ENCODER
- OPERATOR WORKSTATION

**NOTES:**

1. 144-FIBER CABLES FROM WEST WILL BE INSTALLED BY OTHERS AND COILED ON NORTH AND SOUTH SIDES OF STR. #632. CONTRACTOR SHALL RUN ALL CABLES TO NODE HOUSE 473 AS SHOWN.
2. COORDINATE WEST COMMUNICATION VAULT AND DUCT LOCATIONS WITH EXISTING AT&T MANHOLE AND ASSOCIATED DUCTS.
3. PENETRATE EXISTING HANDHOLE FOR NEW 2" DUCTS. COORDINATE ENTRY LOCATIONS WITH EXISTING DUCTS AND WOOD POLE WP1.
4. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
5. SEE DWG. FCI-302 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION.
6. COIL 200' OF SLACK OF EACH CABLE IN THE NEW COMM VAULTS BEFORE RUNNING CABLE INTO NODE HOUSE.
7. CLEAR EXISTING VEGETATION AS REQUIRED FOR INSTALLATION OF WEST COMMUNICATION VAULT AND ASSOCIATED DUCTS.



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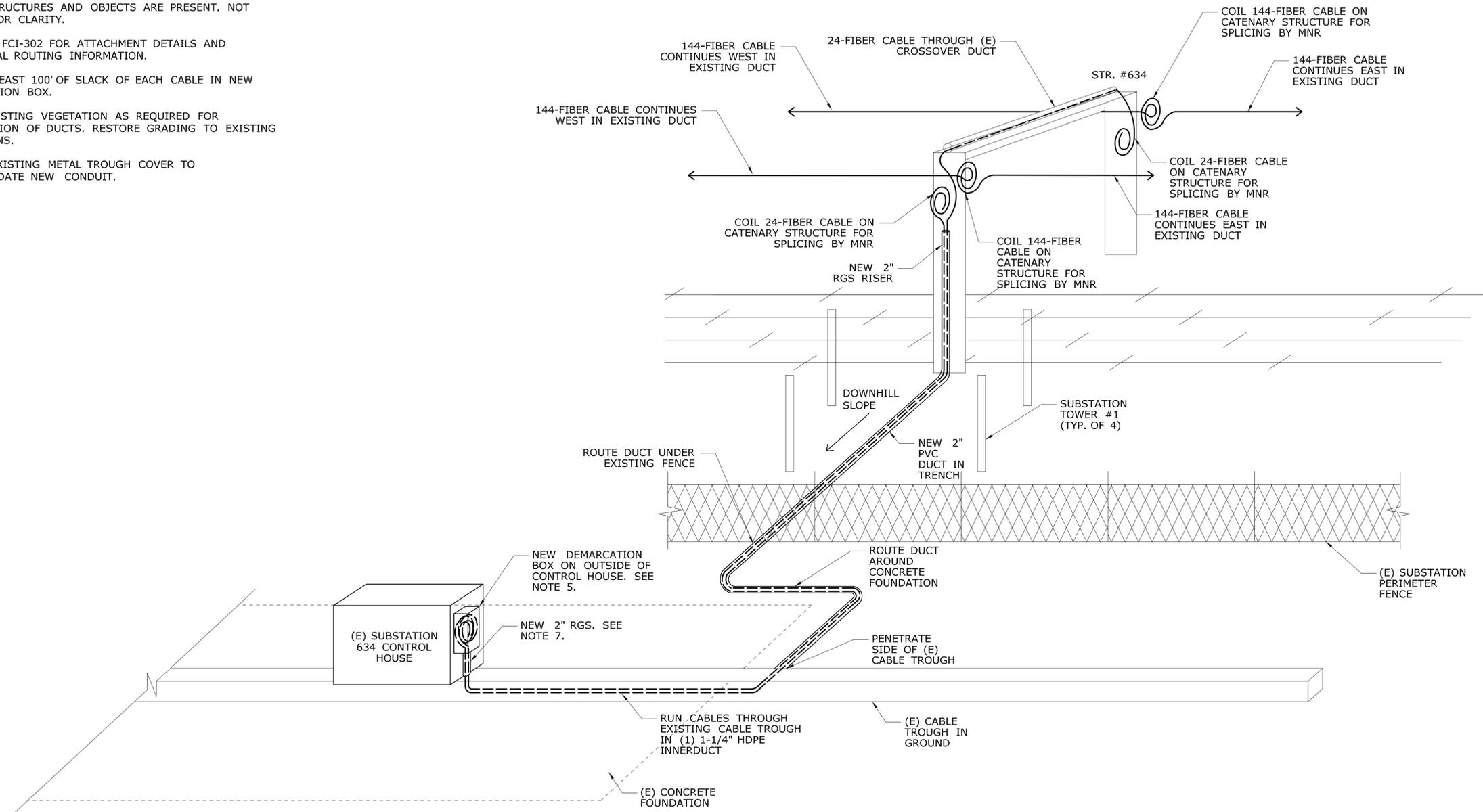
PROJECT TITLE:  
**NETWORK INFRASTRUCTURE  
 UPGRADE FOR SECURITY  
 NEW HAVEN LINE  
 PHASE 2**

TOWN:  
**WESTPORT  
 TO STRATFORD**  
 DRAWING TITLE:  
**FIBER DROP SCHEMATIC  
 NODE HOUSE 473**

PROJECT NO.  
**300-0178**  
 DRAWING NO.  
**FCI-610**  
 SHEET NO.  
**06.05**

**NOTES:**

1. DUCTS FOR BACKBONE CABLE IN THIS AREA INSTALLED BY OTHERS. FURNISH AND INSTALL 144-FIBER BACKBONE CABLE THROUGH EXISTING DUCTS.
2. FURNISH AND INSTALL (2) 24-FIBER CABLES TO SUBSTATION 634 AS SHOWN.
3. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
4. SEE DWG. FCI-302 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION.
5. COIL AT LEAST 100' OF SLACK OF EACH CABLE IN NEW DEMARCATION BOX.
6. CLEAR EXISTING VEGETATION AS REQUIRED FOR INSTALLATION OF DUCTS. RESTORE GRADING TO EXISTING CONDITIONS.
7. MODIFY EXISTING METAL TROUGH COVER TO ACCOMMODATE NEW CONDUIT.

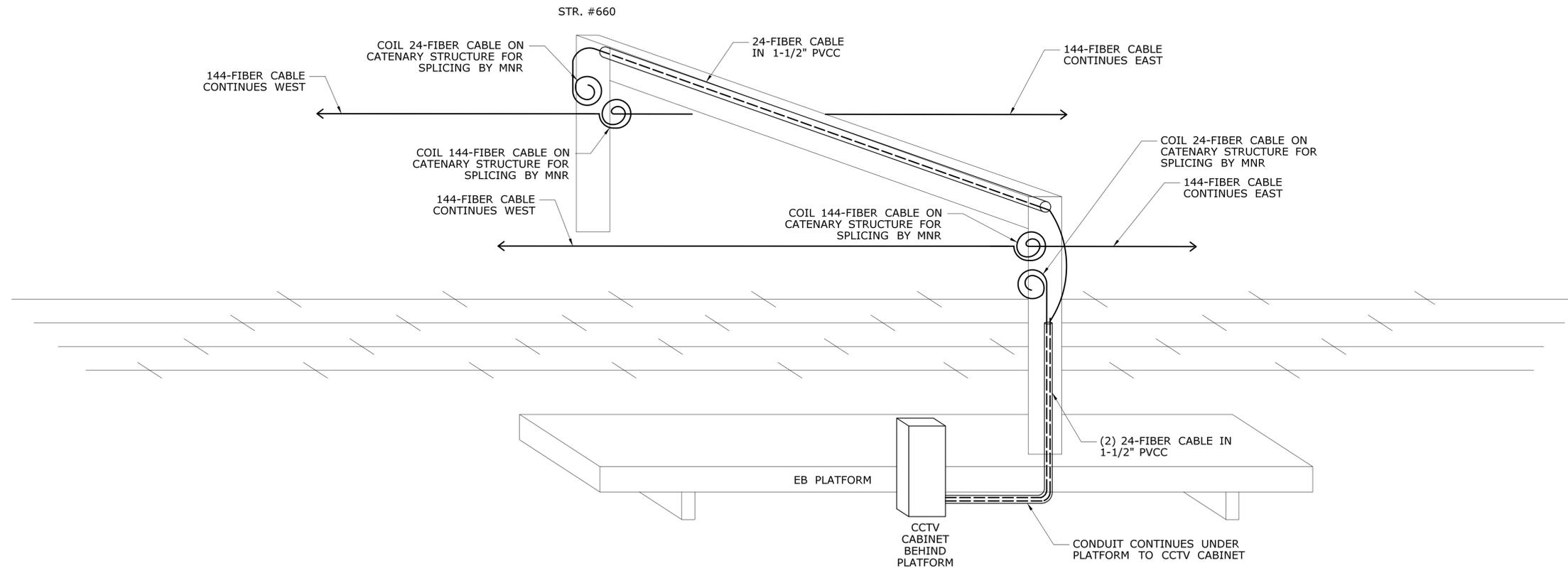


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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



**NOTES:**

1. SEE DWG. FCI-309 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION. SEE DWG. FCI-571 FOR STATION LAYOUT.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
3. ADDITIONAL 24-FIBER CABLE FOR FUTURE CSI PROJECT SHALL BE COILED ON SOUTH SIDE OF STR. #660, NOT SHOWN FOR CLARITY. SEE DWG. FCI-309.



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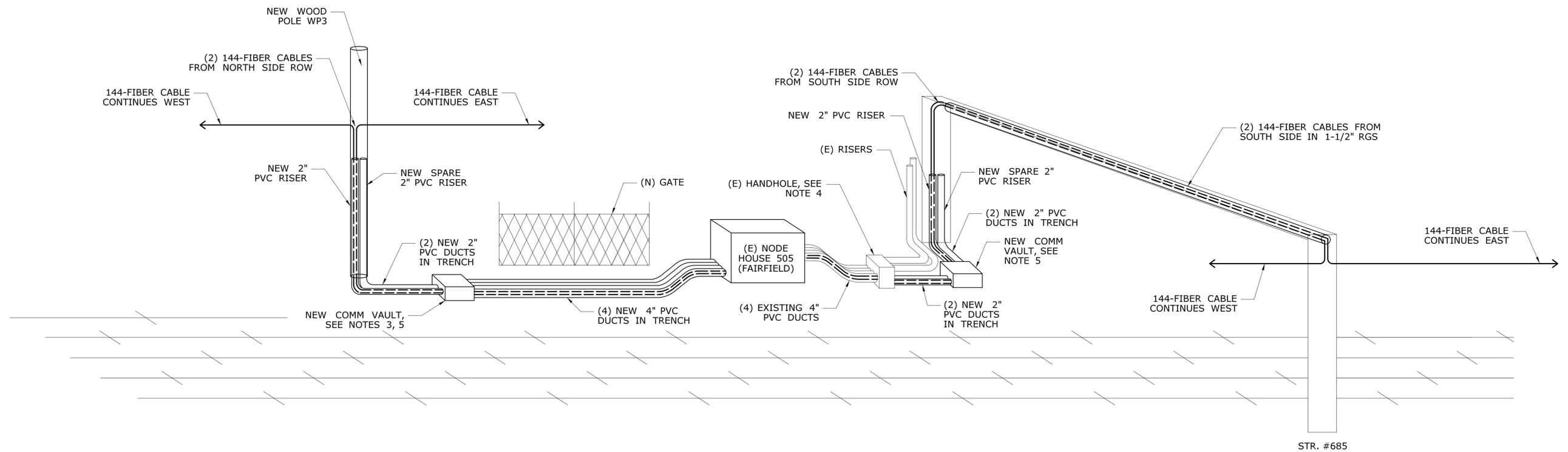
PROJECT TITLE:  
**NETWORK INFRASTRUCTURE  
 UPGRADE FOR SECURITY  
 NEW HAVEN LINE  
 PHASE 2**

TOWN:  
**WESTPORT  
 TO STRATFORD**  
 DRAWING TITLE:  
**FIBER DROP SCHEMATIC  
 EB SOUTHPORT STATION**

PROJECT NO.  
**300-0178**  
 DRAWING NO.  
**FCI-613**  
 SHEET NO.  
**06.08**

**NOTES:**

1. SEE DWG. FCI-315 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
3. COORDINATE WEST COMMUNICATION VAULT AND WOOD POLE WP3 WITH NEW GATE, NEW FENCE, AND EXISTING SIDING TRACK.
4. PENETRATE EXISTING HANDHOLE FOR NEW 2" DUCTS. COORDINATE ENTRY LOCATIONS WITH EXISTING DUCTS.
5. COIL 200' OF SLACK OF EACH CABLE IN THE NEW COMM VAULTS BEFORE RUNNING CABLE INTO NODE HOUSE.



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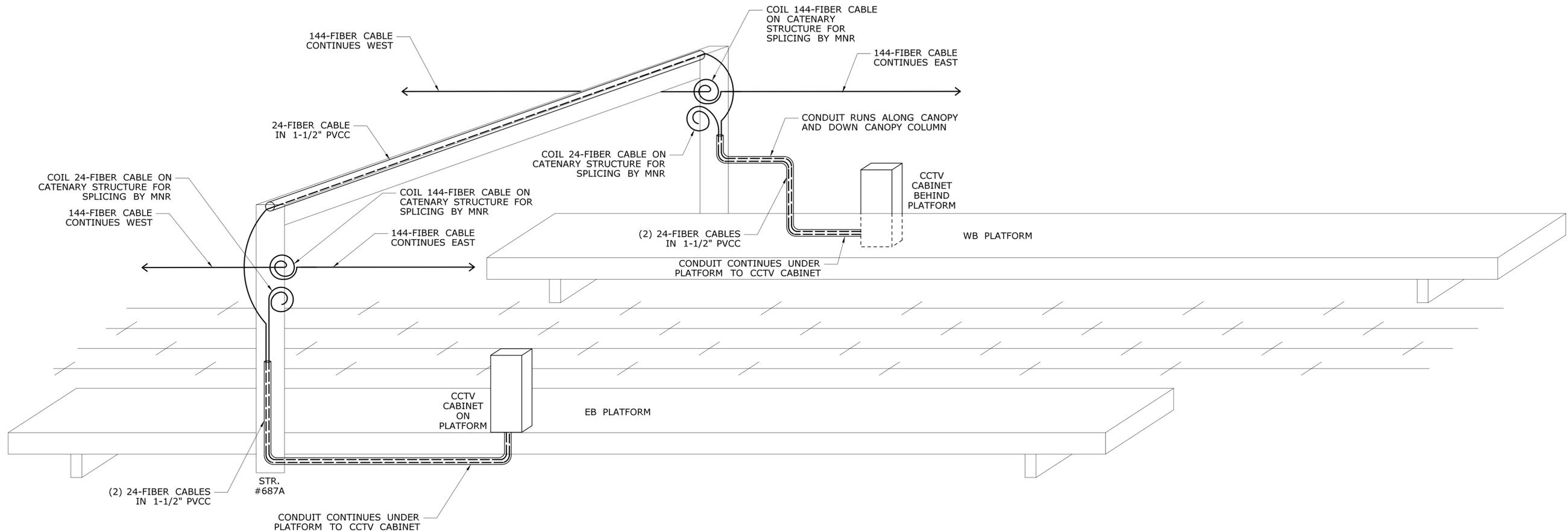
PROJECT TITLE:  
**NETWORK INFRASTRUCTURE  
UPGRADE FOR SECURITY  
NEW HAVEN LINE  
PHASE 2**

TOWN:  
**WESTPORT  
TO STRATFORD**  
DRAWING TITLE:  
**FIBER DROP SCHEMATIC  
NODE HOUSE 505**

PROJECT NO.  
**300-0178**  
DRAWING NO.  
**FCI-614**  
SHEET NO.  
**06.09**

**NOTES:**

1. SEE DWG. FCI-316 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION. SEE DWG. FCI-560 FOR STATION LAYOUT.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
3. DIAGRAM EXCLUDES FIBER TO REMOTE SWITCH CABINETS. SEE STATION LAYOUT FOR DETAILS.
4. ADDITIONAL 24-FIBER CABLES FOR FUTURE CSI PROJECT SHALL BE COILED ON BOTH SIDES OF STR. #660, NOT SHOWN FOR CLARITY. SEE DWG. FCI-316.



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PROJECT TITLE:

**NETWORK INFRASTRUCTURE  
UPGRADE FOR SECURITY  
NEW HAVEN LINE  
PHASE 2**

TOWN:

**WESTPORT  
TO STRATFORD**

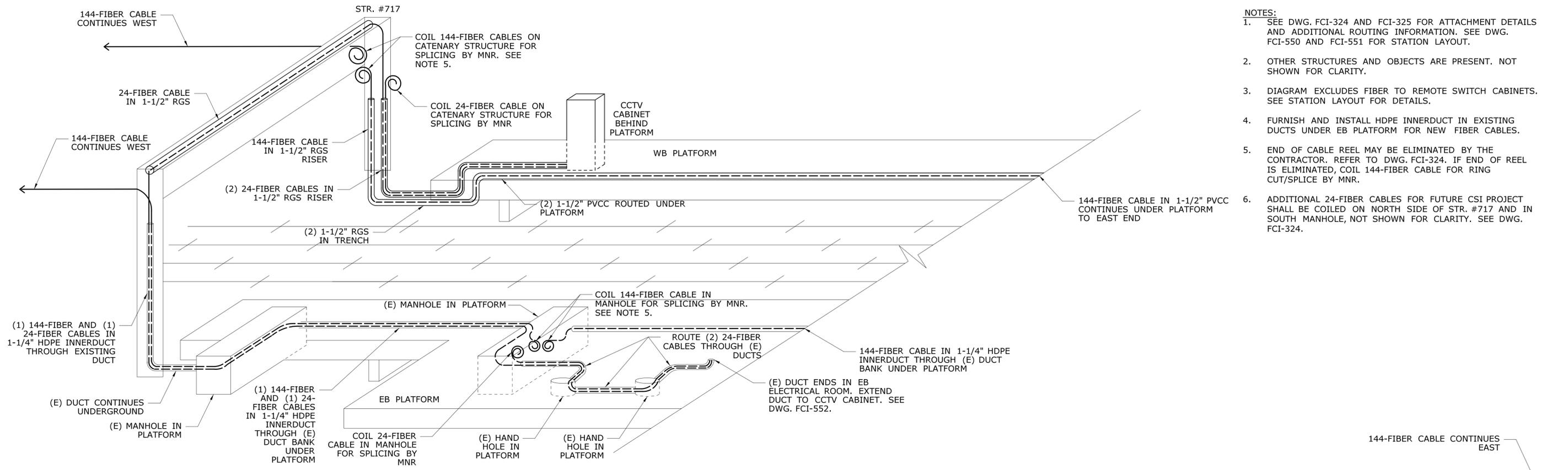
DRAWING TITLE:

**FIBER DROP SCHEMATIC  
FAIRFIELD STATION**

PROJECT NO.  
**300-0178**

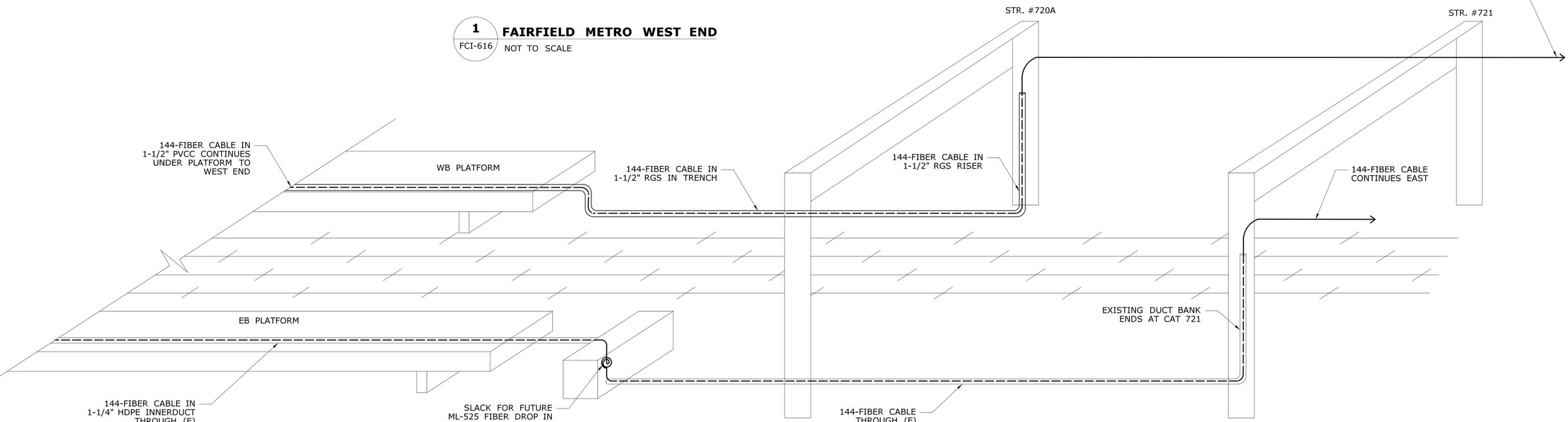
DRAWING NO.  
**FCI-615**

SHEET NO.  
**06.010**



- NOTES:**
- SEE DWG. FCI-324 AND FCI-325 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION. SEE DWG. FCI-550 AND FCI-551 FOR STATION LAYOUT.
  - OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
  - DIAGRAM EXCLUDES FIBER TO REMOTE SWITCH CABINETS. SEE STATION LAYOUT FOR DETAILS.
  - FURNISH AND INSTALL HDPE INNERDUCT IN EXISTING DUCTS UNDER EB PLATFORM FOR NEW FIBER CABLES.
  - END OF CABLE REEL MAY BE ELIMINATED BY THE CONTRACTOR. REFER TO DWG. FCI-324. IF END OF REEL IS ELIMINATED, COIL 144-FIBER CABLE FOR RING CUT/SPLICE BY MNR.
  - ADDITIONAL 24-FIBER CABLES FOR FUTURE CSI PROJECT SHALL BE COILED ON NORTH SIDE OF STR. #717 AND IN SOUTH MANHOLE, NOT SHOWN FOR CLARITY. SEE DWG. FCI-324.

**1 FAIRFIELD METRO WEST END**  
FCI-616 NOT TO SCALE

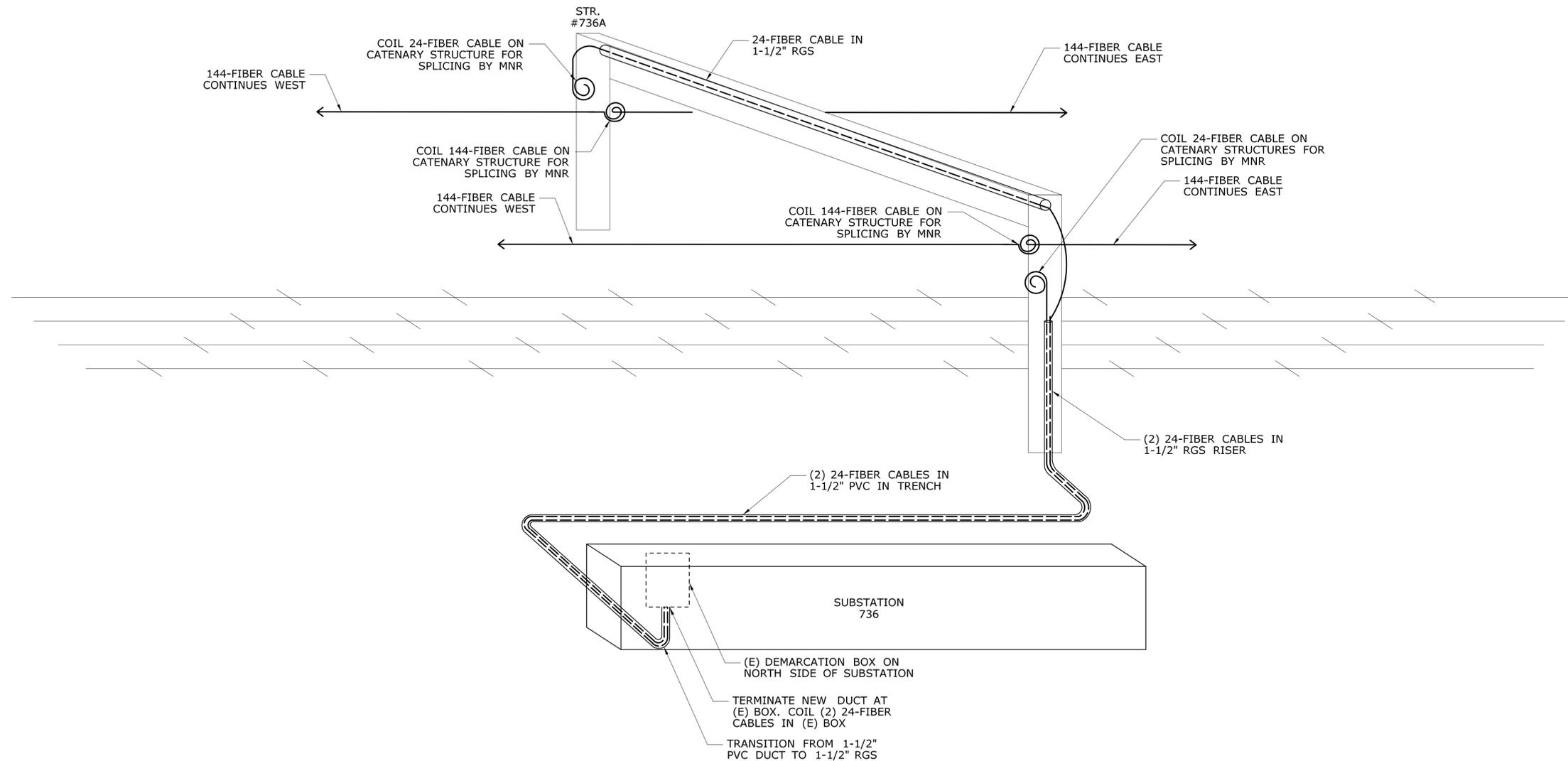


**2 FAIRFIELD METRO EAST END**  
FCI-616 NOT TO SCALE

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			

**NOTES:**

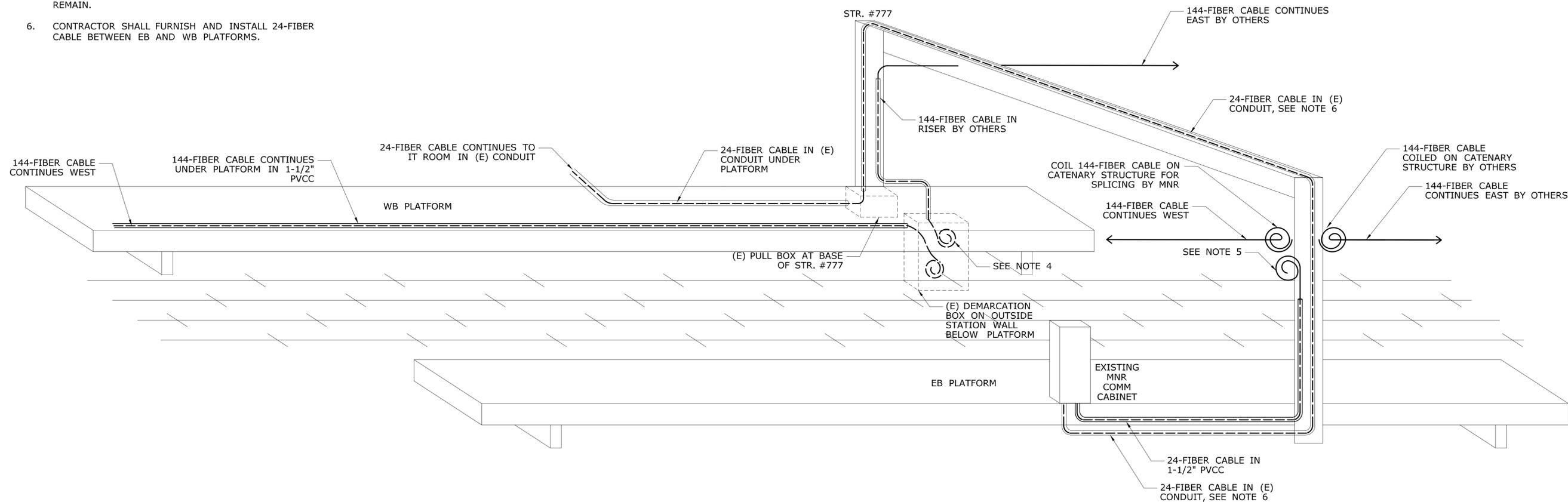
1. SEE DWG. FCI-329 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.



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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			

**NOTES:**

1. SEE DWG. FCI-339 AND FCI-340 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION. SEE DWG. FCI-530 THRU FCI-534 FOR STATION LAYOUT.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
3. DIAGRAM EXCLUDES FIBER TO REMOTE SWITCH CABINETS AND EB CCTV CABINET. SEE STATION LAYOUT FOR DETAILS.
4. EXISTING 144-FIBER CABLE FROM EAST ENDS IN EXISTING DEMARCATION BOX UNDER PLATFORM AND IS SPLICED TO ANOTHER CABLE CONNECTED TO THE BRIDGEPORT STATION IT ROOM (NOT SHOWN FOR CLARITY).
5. (2) EXISTING 24-FIBER CABLES WILL BE COILED ON SOUTH SIDE OF STR. #777 BY OTHERS. RUN (1) 24-FIBER CABLE TO EB COMM CABINET ON PLATFORM AS SHOWN. LEAVE SLACK FOR SPLICING BY MNR. OTHER CABLE SHALL REMAIN.
6. CONTRACTOR SHALL FURNISH AND INSTALL 24-FIBER CABLE BETWEEN EB AND WB PLATFORMS.



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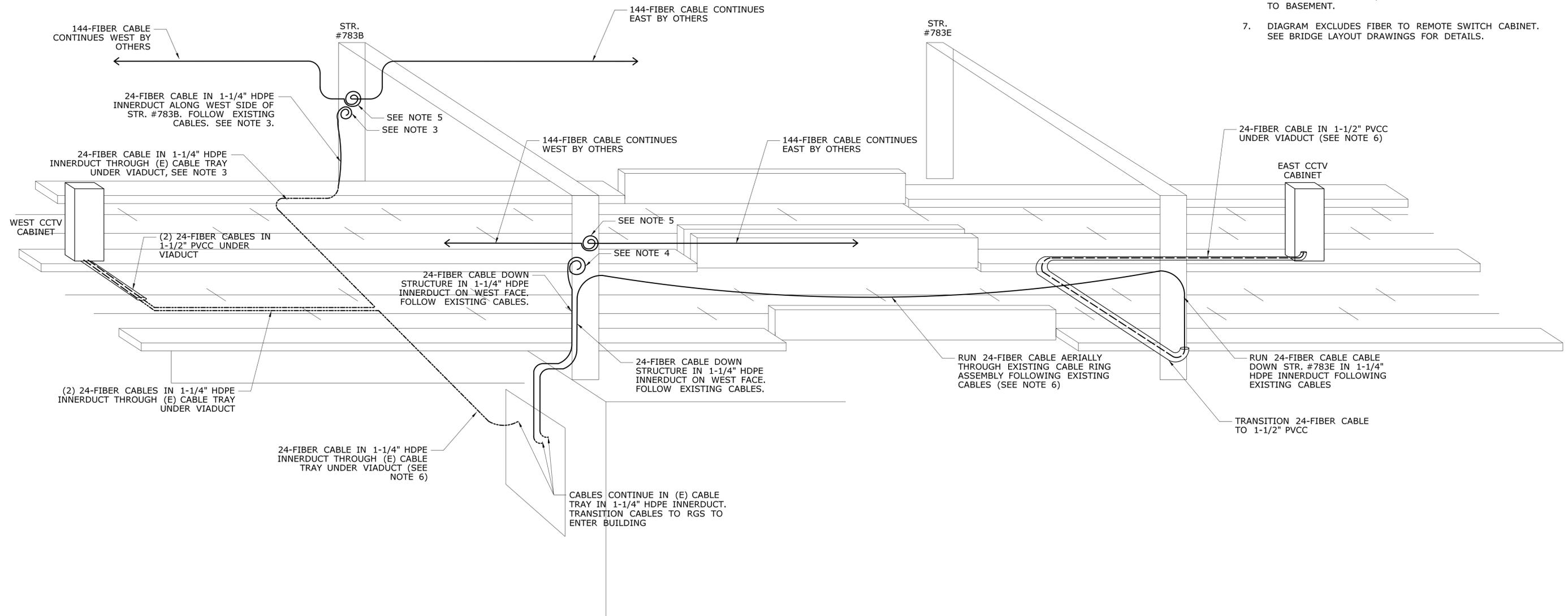
PROJECT TITLE:  
**NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2**

TOWN:  
**WESTPORT TO STRATFORD**  
DRAWING TITLE:  
**FIBER DROP SCHEMATIC BRIDGEPORT STATION**

PROJECT NO.  
**300-0178**  
DRAWING NO.  
**FCI-618**  
SHEET NO.  
**06.013**

**NOTES:**

1. SEE DWG. FCI-510 THRU FCI-512 FOR BRIDGE LAYOUT.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
3. (2) EXISTING 24-FIBER CABLES WILL BE COILED ON NORTH SIDE OF STR. #783B BY OTHERS. REMOVE (1) 24-FIBER CABLE AND INSTALL CABLE BETWEEN CAT. 783B AND WEST CCTV CABINET AS SHOWN. LEAVE SLACK AT STR. #783B FOR SPLICING BY MNR. OTHER CABLE SHALL REMAIN.
4. (2) EXISTING 24-FIBER CABLES WILL BE COILED ON SOUTH SIDE OF CAT. 783B BY OTHERS. REMOVE (1) 24-FIBER CABLE AND INSTALL CABLE BETWEEN STR. #783B AND BASEMENT RACK AS SHOWN. LEAVE SLACK AT STR. #783B FOR SPLICING BY MNR. OTHER CABLE SHALL REMAIN.
5. 144-FIBER CABLES WILL BE COILED ON STR. #783B BY OTHERS.
6. FURNISH AND INSTALL 24-FIBER CABLES FROM EAST CCTV CABINET TO BASEMENT, AND FROM WEST CCTV CABINET TO BASEMENT.
7. DIAGRAM EXCLUDES FIBER TO REMOTE SWITCH CABINET. SEE BRIDGE LAYOUT DRAWINGS FOR DETAILS.



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PROJECT TITLE:

**NETWORK INFRASTRUCTURE  
UPGRADE FOR SECURITY  
NEW HAVEN LINE  
PHASE 2**

TOWN:

**WESTPORT  
TO STRATFORD**

DRAWING TITLE:

**FIBER DROP SCHEMATIC  
PECK BRIDGE**

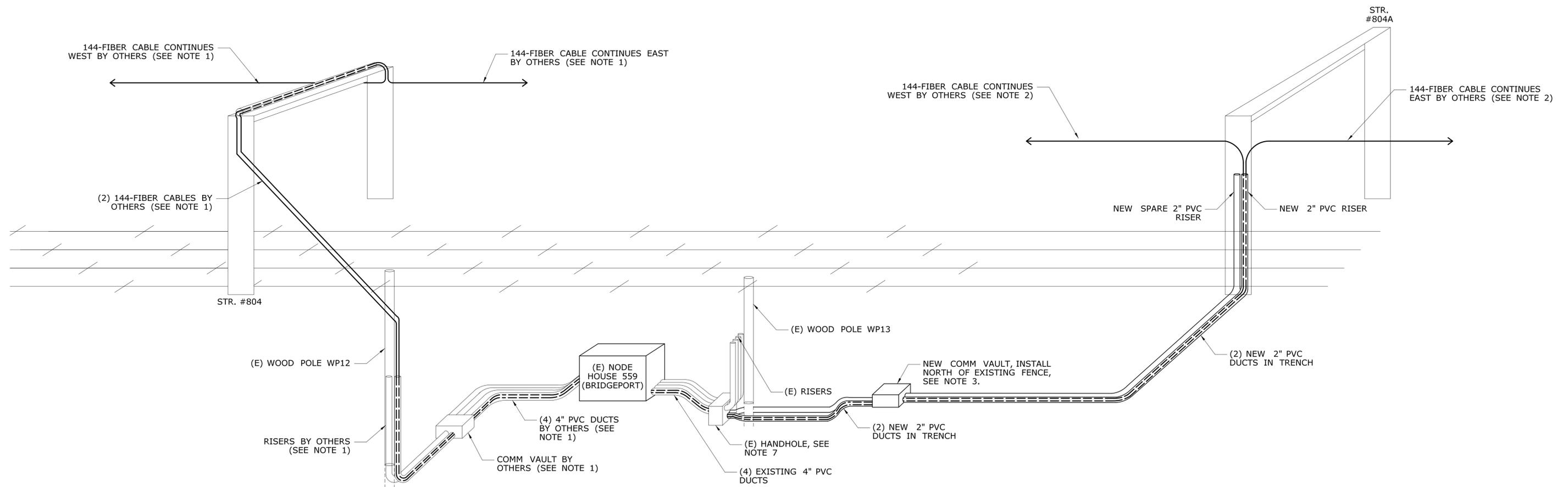
PROJECT NO.  
**300-0178**

DRAWING NO.  
**FCI-619**

SHEET NO.  
**06.014**

**NOTES:**

1. ALL WORK ON NORTH SIDE ROW & WEST SIDE OF NODE HOUSE WILL BE PERFORMED BY OTHERS. SHOWN FOR REFERENCE ONLY.
2. 144-FIBER CABLES WILL BE INSTALLED BY OTHERS AND COILED ON SOUTH SIDE OF STR. #804A. CONTRACTOR SHALL RUN ALL CABLES TO NODE HOUSE 559 AS SHOWN.
3. COORDINATE FINAL VAULT LOCATION IN FIELD WITH ENGINEER.
4. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
5. SEE DWG. FCI-341 FOR ATTACHMENT DETAILS AND ADDITIONAL ROUTING INFORMATION.
6. COIL CABLE SLACK IN THE NEW COMM VAULT BEFORE RUNNING CABLE INTO NODE HOUSE.
7. PENETRATE EXISTING HANDHOLE FOR NEW 2" DUCTS. COORDINATE ENTRY LOCATIONS WITH EXISTING DUCTS AND WOOD POLE WP13.



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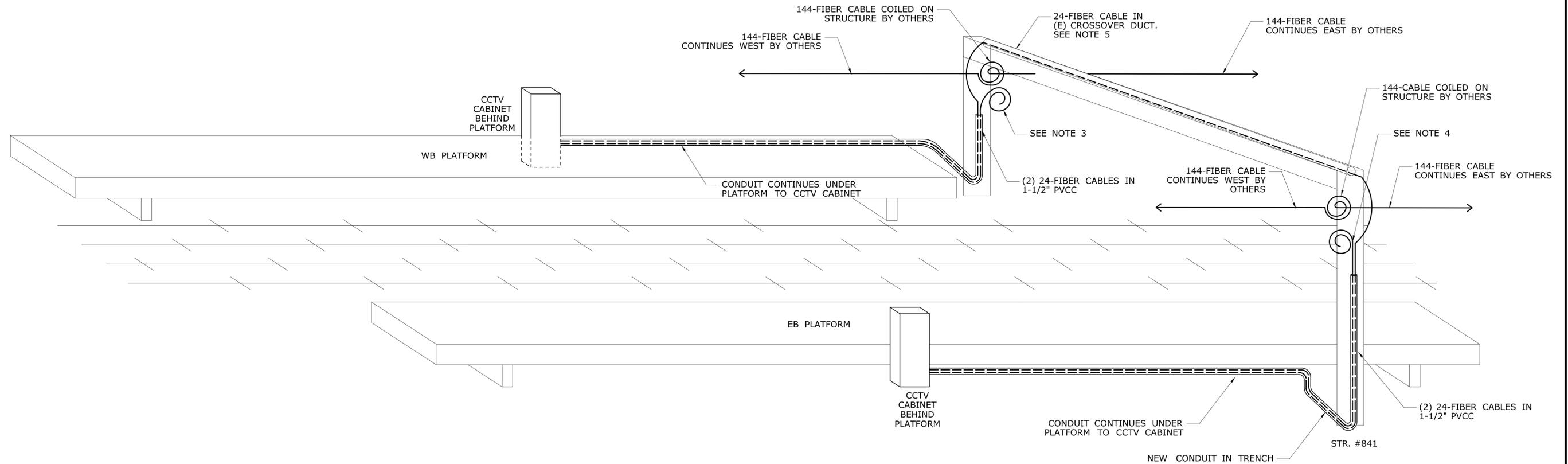
PROJECT TITLE:  
**NETWORK INFRASTRUCTURE  
UPGRADE FOR SECURITY  
NEW HAVEN LINE  
PHASE 2**

TOWN:  
**WESTPORT  
TO STRATFORD**  
DRAWING TITLE:  
**FIBER DROP SCHEMATIC  
NODE HOUSE 559**

PROJECT NO.  
**300-0178**  
DRAWING NO.  
**FCI-620**  
SHEET NO.  
**06.015**

**NOTES:**

1. SEE DWG. FCI-501 FOR ATTACHMENT DETAILS, STATION LAYOUT, AND ADDITIONAL ROUTING INFORMATION.
2. OTHER STRUCTURES AND OBJECTS ARE PRESENT. NOT SHOWN FOR CLARITY.
3. (2) EXISTING 24-FIBER CABLES WILL BE COILED ON NORTH SIDE OF STR. #841 BY OTHERS. RUN (1) 24-FIBER CABLE TO WB CCTV CABINET AS SHOWN. LEAVE SLACK ON STR. #804 FOR SPLICING BY MNR. OTHER CABLE SHALL REMAIN.
4. (2) EXISTING 24-FIBER CABLES WILL BE COILED ON SOUTH SIDE OF STR. #841 BY OTHERS. RUN (1) 24-FIBER CABLE TO EB CCTV CABINET AS SHOWN. LEAVE SLACK ON STR. #804 FOR SPLICING BY MNR. OTHER CABLE SHALL REMAIN.
5. CONTRACTOR SHALL FURNISH AND INSTALL 24-FIBER CABLE BETWEEN EB AND WB CCTV CABINETS.

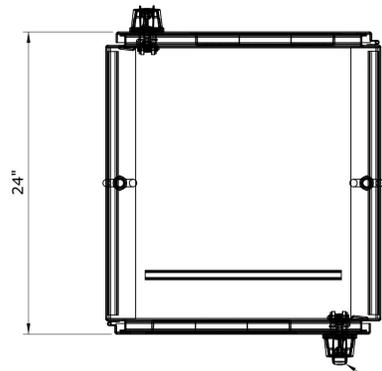


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CHECKED BY: <b>CH</b>		NOT TO SCALE					
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016	Filename: ...FCI-621_FA_Sheet_0300-0178.dgn		

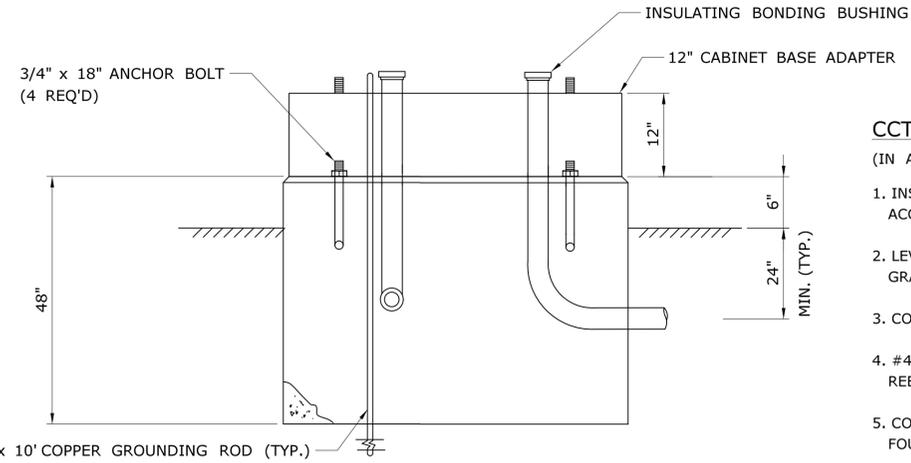
# PARTS LIST

SEE NOTE 3

ITEM NO.	QTY.	DESCRIPTION
1	1	NEMA TYPE 4X CABINET
2	2	LED STRIP LIGHT
3	1	72-PORT FIBER OPTIC PATCH PANEL WITH SPLICE TRAYS
4	AS NEEDED	CABLE MANAGEMENT PANELS
5	1	POE SURGE SUPPRESSION - RACK MOUNT
6	1-2	CISCO IE4000 POE NETWORK SWITCH
7	1-2	170W CISCO POWER SUPPLY (NOT SHOWN, SEE NOTE 6)
8	1	60W POE INJECTOR
9	1	PTZ POWER SUPPLY
10	AS REQUIRED	CIRCUIT BREAKERS
11	1	POWER SURGE SUPPRESSION (NOT SHOWN)
12	1	DUPLEX CONVENIENCE OUTLET
13	AS NEEDED	TERMINAL BLOCKS
14	1	GROUND BUS BAR
15	2	TAMPER SWITCH (NOT SHOWN, SEE NOTE 8)
16	2	DOOR SWITCH FOR LIGHT (NOT SHOWN, SEE NOTE 9)

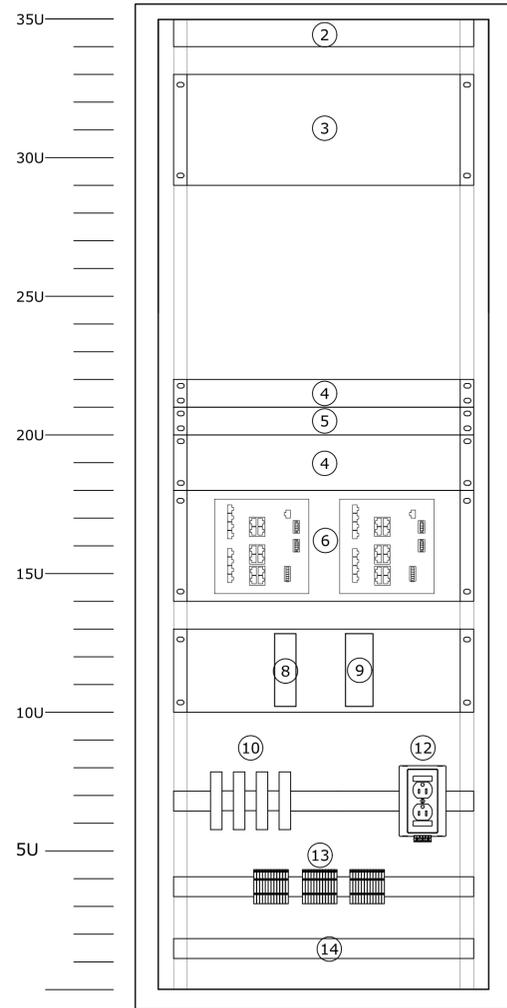


**CABINET TOP VIEW**  
(DOORS SHOWN)

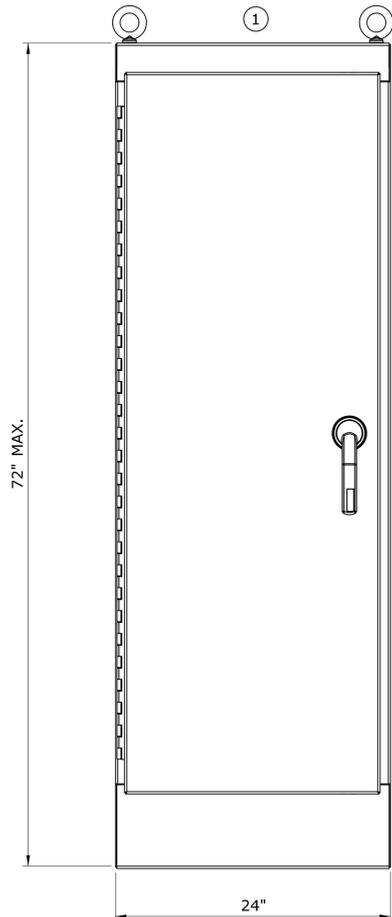


**3 CAST-IN-PLACE FOUNDATION**  
FCI-630 NOT TO SCALE

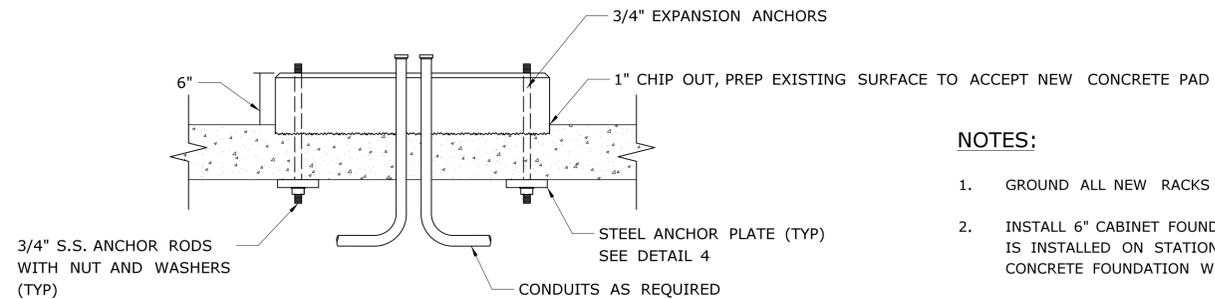
- CCTV CABINET FOUNDATION NOTES:**  
(IN ACCORDANCE WITH CONNECTICUT DOT STANDARD DETAIL)
1. INSTALL FOUNDATION ON 6" COMPACTED GRAVEL, IN ACCORDANCE WITH CONNECTICUT DOT SECTION 2.14.
  2. LEVEL FOUNDATION WITH A PROJECTION OF 6" ABOVE FINISHED GRADE.
  3. CONCRETE: CLASS "F" CONFORMING TO ARTICLE M.03-02.
  4. #4 RE-BAR 2" MIN. COVER AROUND ALL OPENINGS. 3 - #4 REBARS IN EACH CORNER.
  5. CONDUITS SHALL NOT PROJECT MORE THAN 2" ABOVE FOUNDATION.
  6. INSTALL A MINIMUM OF ONE SPARE 2" CONDUITS IN THE FOUNDATION. SPARE CONDUITS SHALL EXTEND A MINIMUM OF 24" OUTSIDE THE FOUNDATION.



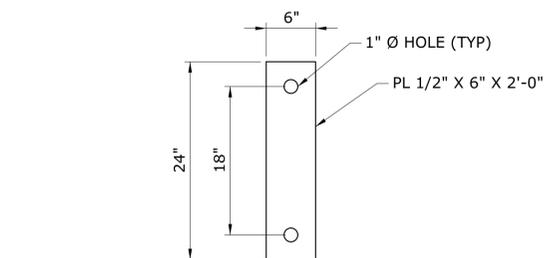
**CABINET INTERIOR**  
(ENLARGED, DOOR REMOVED)



**CABINET FRONT VIEW**  
(DOOR SHOWN)



**2 PLATFORM PAD DETAIL**  
FCI-630 NOT TO SCALE

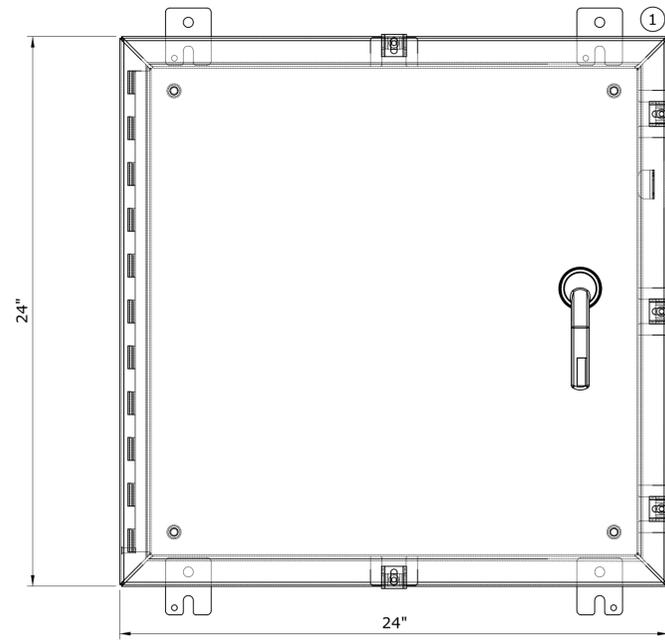


**4 ANCHOR PLATE**  
FCI-630 NOT TO SCALE

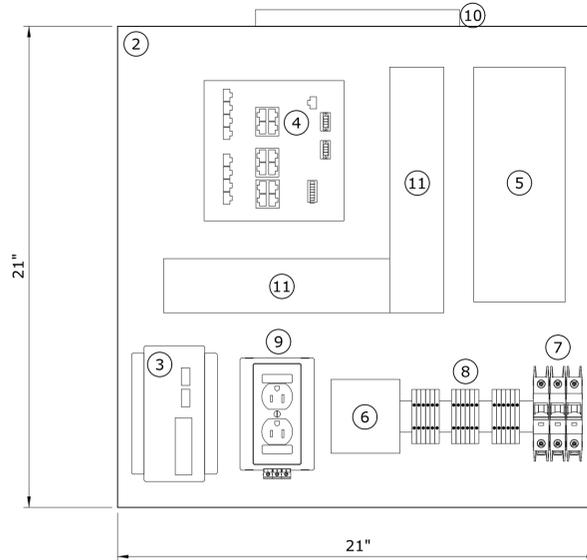
- NOTES:**
1. GROUND ALL NEW RACKS AND CABINETS.
  2. INSTALL 6" CABINET FOUNDATION PAD WHERE CCTV CABINET IS INSTALLED ON STATION PLATFORMS. USE CAST-IN-PLACE CONCRETE FOUNDATION WHERE INSTALLED AT GRADE.
  3. DRAWING DEPICTS TYPICAL PARTS REQUIRED FOR CCTV FIELD CABINET ENCLOSURES. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL SUBMIT FINAL CABINET LAYOUTS, MOUNTING DETAILS, AND WIRING DIAGRAMS FOR APPROVAL BY THE ENGINEER.
  4. EQUIPMENT WITHIN THE ENCLOSURE SHALL BE CLEARLY LABELED. PROVIDE DRAWING POCKET WITH COMPLETE, APPROVED WIRING DIAGRAMS WITHIN ENCLOSURE.
  5. COORDINATE DOOR SWINGS WITH SURROUNDING AREA.
  6. MOUNT CISCO SWITCH POWER SUPPLIES (NOT SHOWN) IN REAR OF CABINET, BEHIND CISCO SWITCHES.
  7. FURNISH AND INSTALL ALL MOUNTING BRACKETS, HARDWARE, OFFSETS, ETC. REQUIRED TO INSTALL THE EQUIPMENT. ENSURE PROPER CLEARANCE IS PROVIDED BETWEEN DOORS AND EQUIPMENT FOR CABLING. PROVIDE OFFSET DIN-RAIL BRACKETS AS NECESSARY FOR PROPER INSTALLATION.
  8. TAMPER SWITCHES SHALL BE CONNECTED TO ALARM INPUTS ON IE4000 FOR REPORTING TO NMS.
  9. PROVIDE DOOR SWITCHES TO CONTROL LIGHTS.
  10. CABINET SHALL INCLUDE A COMPLETE CABLE MANAGEMENT SYSTEM TO CONTROL CABLE BEND RADIUS, PROTECT CABLING, PROVIDE AND MANAGE CABLE SLACK, PROVIDE CABLE STRAIN RELIEF, AND PROVIDE A NEAT AND WORKMANLIKE APPEARANCE.

**1 BASE-MOUNT CCTV CABINET**  
FCI-630 NOT TO SCALE

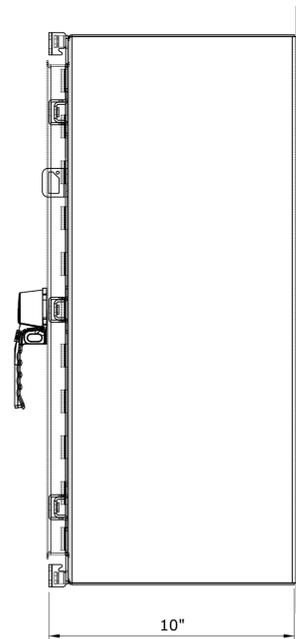
DESIGNER/DRAFTER: <b>EN/MN</b>	<p><b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION</p>	<p>STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461</p>	<p>PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b></p>	<p>TOWN: <b>WESTPORT TO STRATFORD</b></p>	<p>PROJECT NO. <b>300-0178</b></p>
CHECKED BY: <b>CH</b>					
NOT TO SCALE	<p>Plotted Date: 5/2/2016</p>	<p>Filename: ...FCI-630_FA_Sheet_0300-0178.dgn</p>	<p><b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b></p>	<p>SHEET NO. <b>06.017</b></p>	



**CABINET FRONT VIEW**



**CABINET INTERIOR**  
(ENCLOSURE REMOVED)



**CABINET SIDE VIEW**

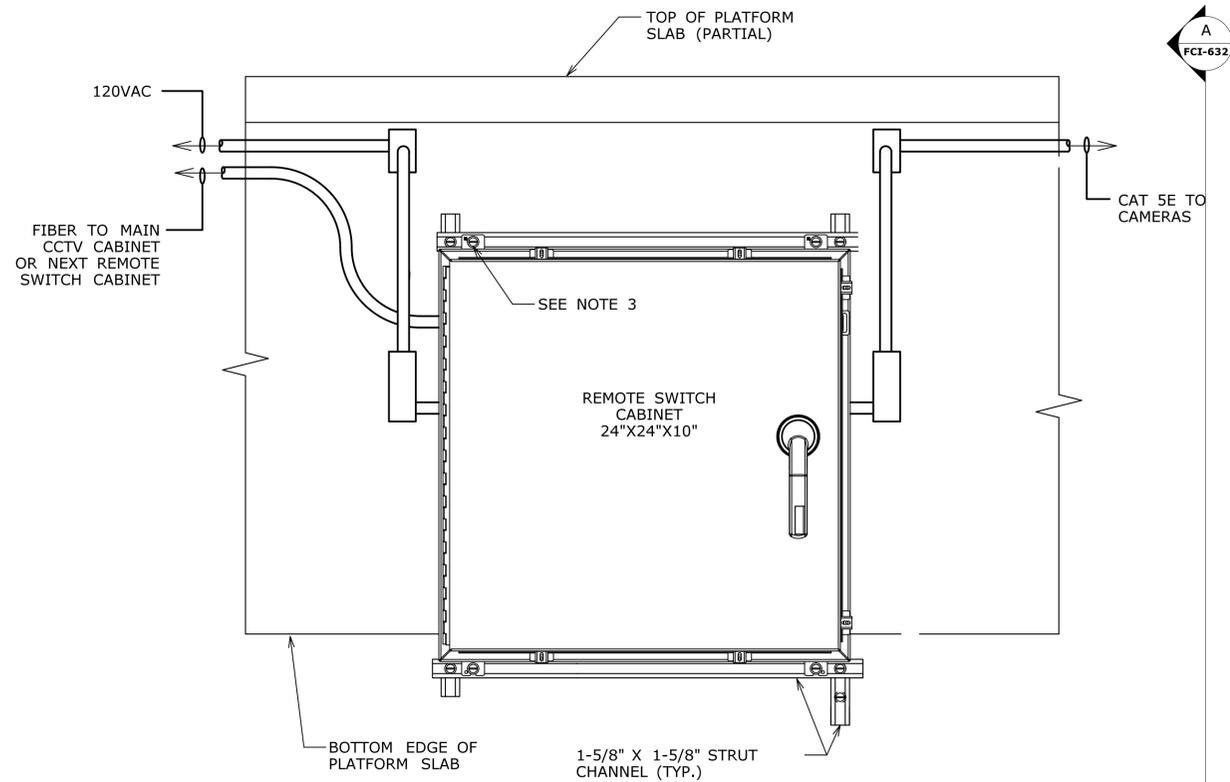
PARTS LIST		
SEE NOTE 2		
ITEM NO.	QTY.	DESCRIPTION
1	1	NEMA TYPE 4X CABINET
2	1	EQUIPMENT BACKPLATE
3	1	170W CISCO POWER SUPPLY
4	1	CISCO IE4000 POE NETWORK SWITCH
5	1-2	POE SURGE SUPPRESSION - WALL MOUNT (SEE NOTE 8)
6	1	POWER SURGE SUPPRESSION
7	AS REQUIRED	CIRCUIT BREAKERS
8	AS NEEDED	TERMINAL BLOCKS
9	1	DUPLEX CONVENIENCE OUTLET
10	1	LED STRIP LIGHT
11	AS NEEDED	CABLE MANAGEMENT PANELS
12	1	TAMPER SWITCH (NOT SHOWN, SEE NOTE 5)
13	1	DOOR SWITCH FOR LIGHT (NOT SHOWN, SEE NOTE 6)

**NOTES:**

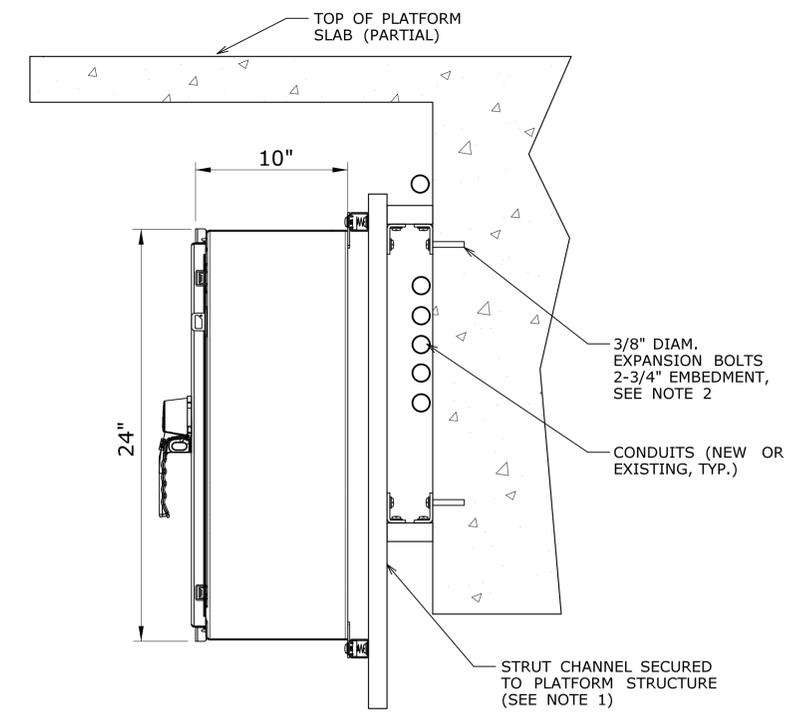
- GROUND ALL NEW RACKS AND CABINETS.
- DRAWING DEPICTS TYPICAL PARTS REQUIRED FOR CCTV FIELD CABINET ENCLOSURES. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL PROVIDE CABINET LAYOUTS, CONFIGURATIONS, AND WIRING DIAGRAMS REQUIRED FOR COMPLETE DESIGN FOR APPROVAL BY THE ENGINEER.
- EQUIPMENT WITHIN THE ENCLOSURE SHALL BE CLEARLY LABELED. PROVIDE DRAWING POCKET WITH COMPLETE, APPROVED WIRING DIAGRAMS WITHIN ENCLOSURE.
- COORDINATE DOOR SWING WITH SURROUNDING AREA.
- TAMPER SWITCH SHALL BE CONNECTED TO ALARM INPUT ON IE4000 FOR REPORTING TO NMS.
- PROVIDE DOOR SWITCH TO CONTROL LIGHT.
- SEE DWG. FCI-632 FOR TYPICAL CABINET MOUNTING DETAILS.
- STACK WALL MOUNT POE SURGE PROTECTION CHASSIS ON TOP OF EACH OTHER WHEN NEEDED. PROVIDE ALL REQUIRED MOUNTING BRACKETS AND HARDWARE.
- CABINET SHALL INCLUDE A COMPLETE CABLE MANAGEMENT SYSTEM TO CONTROL CABLE BEND RADIUS, PROTECT CABLING, PROVIDE AND MANAGE CABLE SLACK, PROVIDE CABLE STRAIN RELIEF, AND PROVIDE A NEAT AND WORKMANLIKE APPEARANCE.

**1 REMOTE SWITCH CABINET**  
FCI-631 NOT TO SCALE

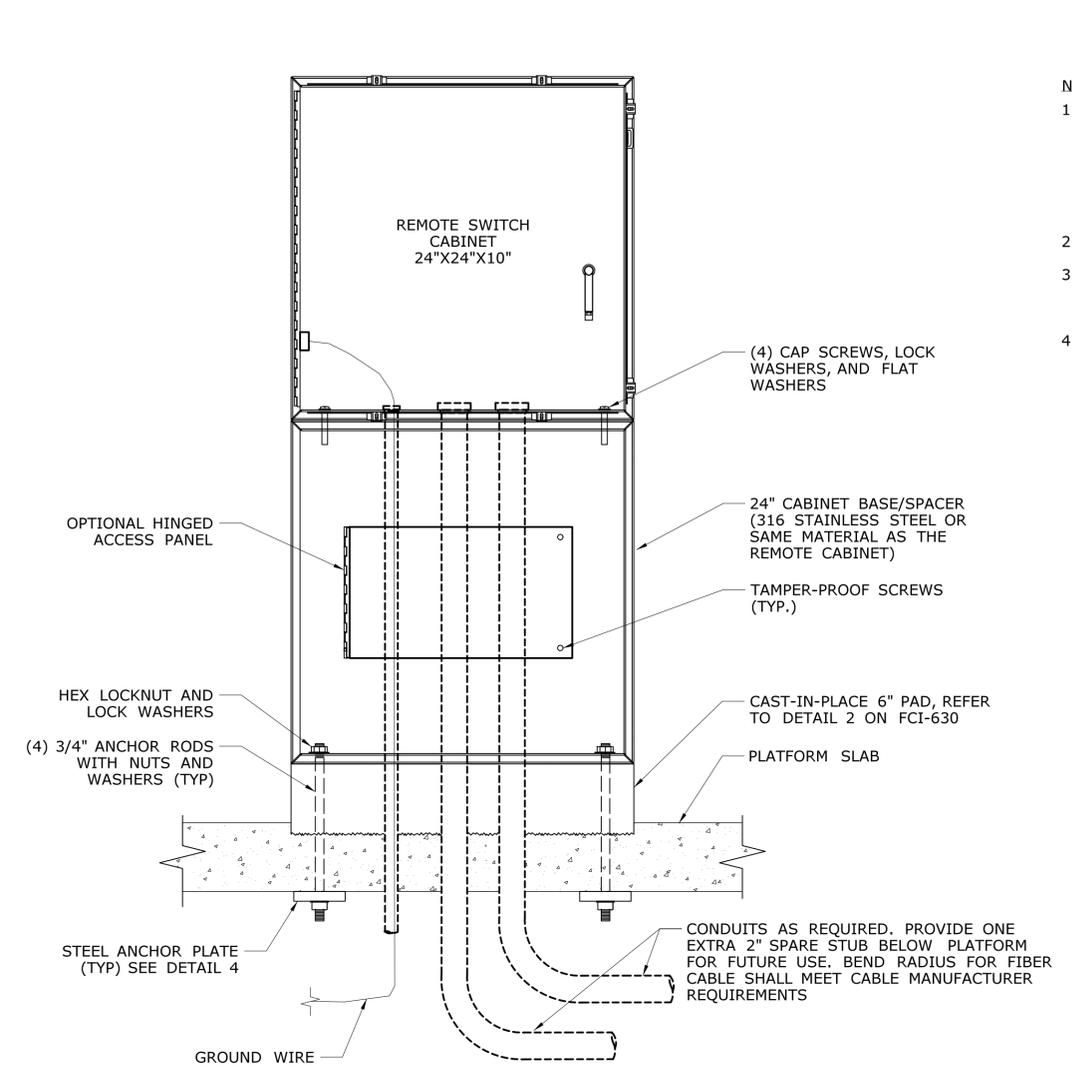
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/MN</b> CHECKED BY: <b>CH</b> NOT TO SCALE	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-631_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b> DRAWING TITLE: <b>REMOTE SWITCH CABINET</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-631</b> SHEET NO. <b>06.018</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



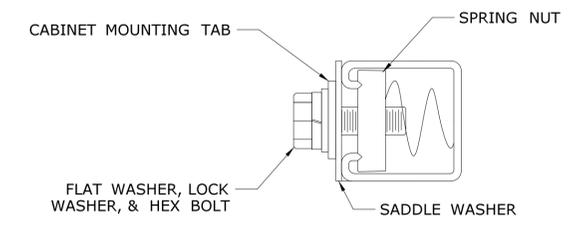
**1 UNDER PLATFORM REMOTE SWITCH CABINET**  
FCI-632 NOT TO SCALE



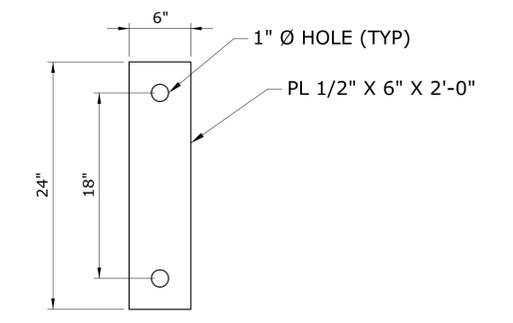
**A UNDER PLATFORM REMOTE SWITCH CABINET**  
FCI-632 NOT TO SCALE  
SIDE VIEW



**2 PLATFORM MOUNTED REMOTE SWITCH CABINET**  
FCI-632 NOT TO SCALE



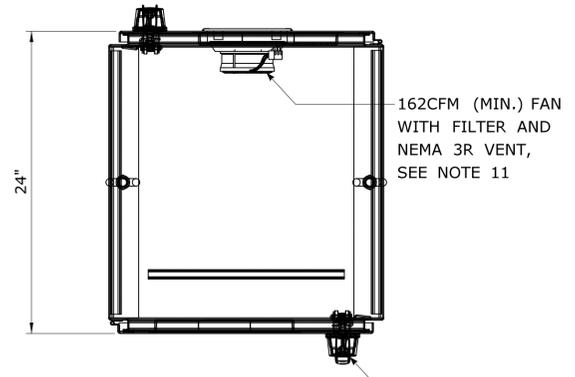
**3 TYPICAL FIELD ENCLOSURE STRUT CHANNEL MOUNT**  
FCI-632 NOT TO SCALE



**4 ANCHOR PLATE**  
FCI-632 NOT TO SCALE

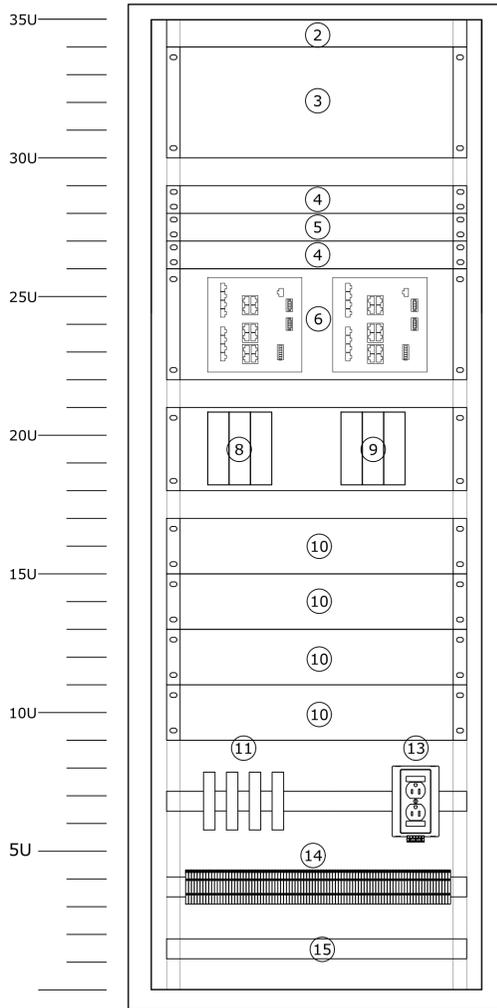
- NOTES:
1. THE CONTRACTOR SHALL FIELD-VERIFY THE FINAL LOCATION OF THE OF THE STATION CCTV CABINETS TO AVOID OBSTRUCTIONS PRIOR TO FABRICATING ANY STRUT CHANNEL COMPONENTS OR RUNNING CONDUIT. CONDUIT SHOWN IS FOR REFERENCE ONLY AND ACTUAL CONFIGURATION WILL VARY BASED ON FIELD CONDITIONS.
  2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
  3. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY CABINET MOUNTING FEET PRIOR TO ANY UNISTRUT FABRICATION.
  4. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATIONS OF ALL EXISTING CONDUITS/REBAR ON OR INSIDE THE CONCRETE PLATFORM PRIOR TO ANY CONSTRUCTION SO THAT FIELD DRILLING WILL NOT DAMAGE ANY EXISTING CONDUITS OR WIRING.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/GH</b> CHECKED BY: <b>CH</b> NOT TO SCALE	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-632_FA_Sheet_0300-0178.dgn	SIGNATURE/ BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-632</b> SHEET NO. <b>06.019</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/2/2016			

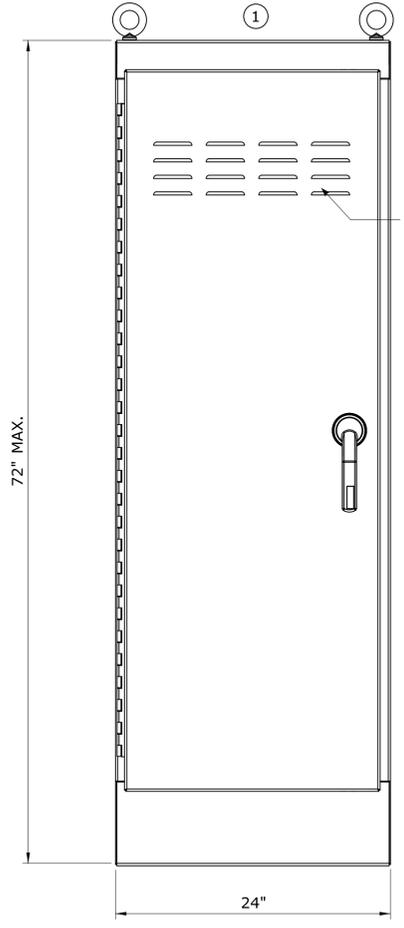


**CABINET TOP VIEW**  
(DOORS SHOWN)

PAD-LOCKABLE HANDLE WITH 3-POINT LATCH (TYP. OF 2)



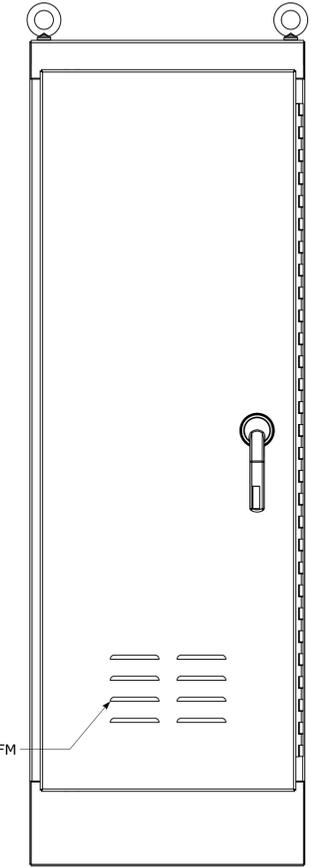
**CABINET INTERIOR**  
(ENLARGED, DOOR REMOVED)



**CABINET FRONT VIEW**  
(DOOR SHOWN)

NEMA 3R VENT

NEMA 3R VENT SIZED FOR FAN CFM



**CABINET REAR VIEW**  
(DOOR SHOWN)

**PARTS LIST**  
SEE NOTE 3

ITEM NO.	WEST CABINET QTY.	EAST CABINET QTY.	DESCRIPTION
1	1	1	NEMA TYPE 3RX CABINET
2	2	2	LED STRIP LIGHT
3	1	1	72-PORT FIBER OPTIC PATCH PANEL WITH SPLICE TRAYS
4	AS NEEDED	AS NEEDED	CABLE MANAGEMENT PANELS
5	1	1	POE SURGE SUPPRESSION - RACK MOUNT
6	1	1	CISCO IE4000 POE NETWORK SWITCH
7	1	1	170W CISCO POWER SUPPLY (NOT SHOWN, SEE NOTE 6)
8	1	3	60W POE INJECTOR
9	1	3	PTZ POWER SUPPLY
10	2	4	IR POWER SUPPLY
11	AS REQUIRED	AS REQUIRED	CIRCUIT BREAKERS
12	1	1	POWER SURGE SUPPRESSION (NOT SHOWN)
13	1	1	DUPLEX CONVENIENCE OUTLET
14	AS NEEDED	AS NEEDED	TERMINAL BLOCKS
15	1	1	GROUND BUS BAR
16	1	1	500W FAN HEATER (NOT SHOWN, SEE NOTE 11)
17	2	2	ADJUSTABLE THERMOSTAT (NOT SHOWN)
18	2	2	TAMPER SWITCH (NOT SHOWN, SEE NOTE 8)
19	2	2	DOOR SWITCH FOR LIGHTS (NOT SHOWN, SEE NOTE 9)

**NOTES:**

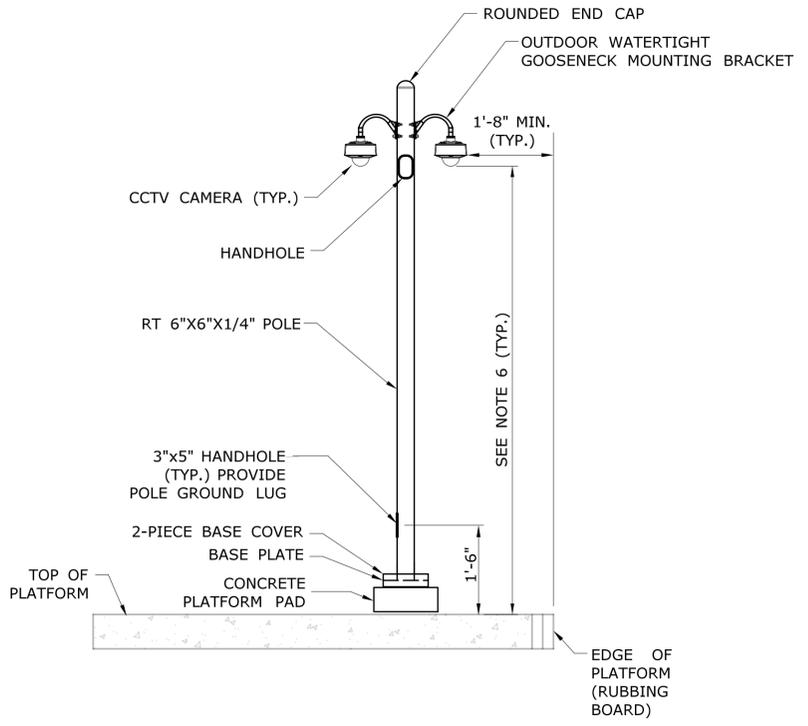
- GROUND NEW CABINETS TO STRUCTURAL STEEL BELOW VIADUCT.
- INSTALL 6" CAST-IN-PLACE CONCRETE FOUNDATION. SEE DETAIL 2 ON DWG. FCI-630.
- DRAWING DEPICTS TYPICAL PARTS REQUIRED FOR CCTV FIELD CABINET ENCLOSURES. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL SUBMIT FINAL CABINET LAYOUTS, MOUNTING DETAILS, AND WIRING DIAGRAMS FOR APPROVAL BY THE ENGINEER.
- EQUIPMENT WITHIN THE ENCLOSURE SHALL BE CLEARLY LABELED. PROVIDE DRAWING POCKET WITH COMPLETE, APPROVED WIRING DIAGRAMS WITHIN ENCLOSURE.
- COORDINATE DOOR SWINGS WITH SURROUNDING AREA.
- MOUNT CISCO SWITCH POWER SUPPLIES (NOT SHOWN) IN REAR OF CABINET, BEHIND CISCO SWITCHES.
- FURNISH AND INSTALL ALL MOUNTING BRACKETS, HARDWARE, OFFSETS, ETC. REQUIRED TO INSTALL THE EQUIPMENT. ENSURE PROPER CLEARANCE IS PROVIDED BETWEEN DOORS AND EQUIPMENT FOR CABLING. PROVIDE OFFSET BRACKETS AS NECESSARY FOR PROPER INSTALLATION.
- TAMPER SWITCHES SHALL BE CONNECTED TO ALARM INPUTS ON IE4000 FOR REPORTING TO NMS.
- PROVIDE DOOR SWITCHES TO CONTROL LIGHTS.
- CABINET SHALL INCLUDE A COMPLETE CABLE MANAGEMENT SYSTEM TO CONTROL CABLE BEND RADIUS, PROTECT CABLING, PROVIDE AND MANAGE CABLE SLACK, PROVIDE CABLE STRAIN RELIEF, AND PROVIDE A NEAT AND WORKMANLIKE APPEARANCE.
- REFER TO SPECIAL PROVISIONS FOR ADDITIONAL HEATING AND VENTILATION REQUIREMENTS.

**1** PECK BRIDGE CCTV CABINET  
FCI-633 NOT TO SCALE

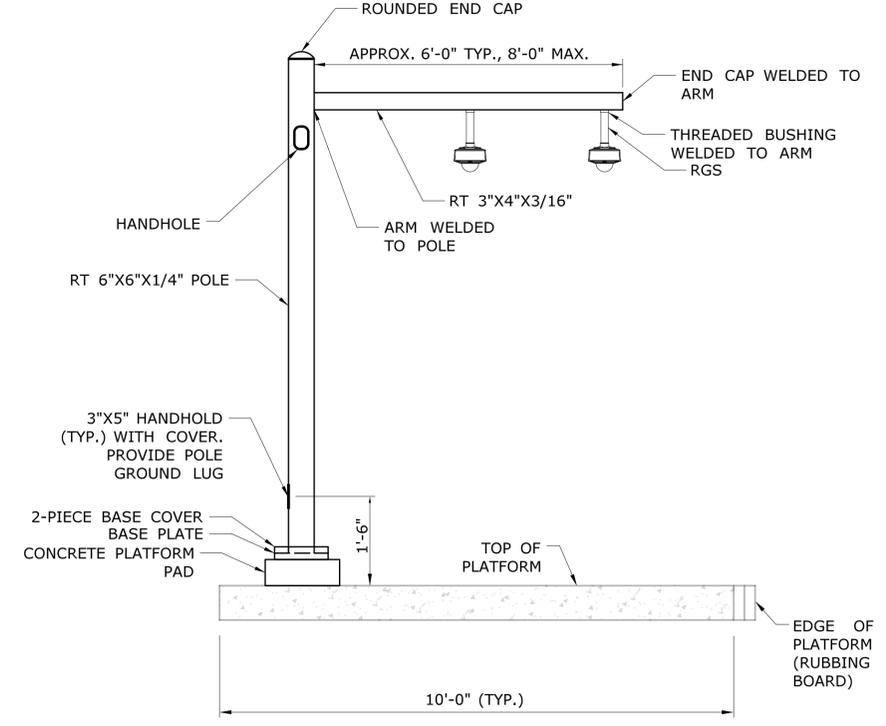
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/MN</b> CHECKED BY: <b>CH</b> NOT TO SCALE	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-633_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b> DRAWING TITLE: <b>PECK BRIDGE CCTV CABINETS</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-633</b> SHEET NO. <b>06.020</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			

**NOTES:**

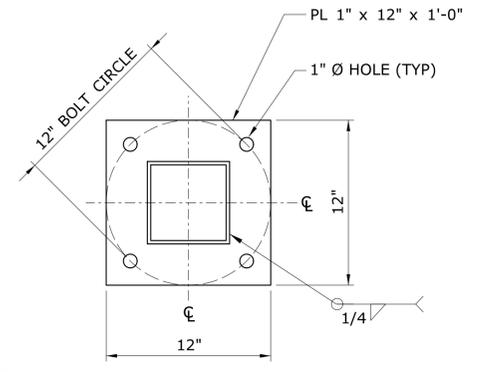
- COORDINATE POLE DIMENSIONS, CAMERA LOCATIONS, AND MOUNTING HEIGHTS WITH EXISTING CONDITIONS AND EQUIPMENT. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE ENGINEER COMPLETE SHOP DRAWINGS FOR THE POLES INCLUDING POLE MATERIALS, DIMENSIONS, AND SECTIONS. THE POLES SHALL BE CONSTRUCTED TO ACCOMMODATE THE CAMERAS, EQUIPMENT, AND LOCATIONS AS SHOWN ON THE CONTRACT DRAWINGS AND IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL.
- THE CONTRACTOR SHALL INCLUDE A STEEL PLATE UNDER PLATFORM AS SHOWN, AND SHALL INCLUDE WITH EACH CCTV POLE SUBMITTAL TO BE APPROVED BY THE ENGINEER.
- POLES SHALL BE PAINTED TO MATCH EXISTING LIGHT POLES AT STATION. POLES AT PECK BRIDGE SHALL BE PAINTED TO MATCH CATENARY STRUCTURES. SUBMIT COLORS FOR APPROVAL BY ENGINEER.
- REFER TO DWG. FCI-645 FOR TYPE B POLES ON PECK BRIDGE FENDER.
- REFER TO CAMERA SCHEDULES FOR APPROXIMATE CAMERA MOUNTING HEIGHTS. ALL MOUNTING HEIGHTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO FABRICATION OF POLES.



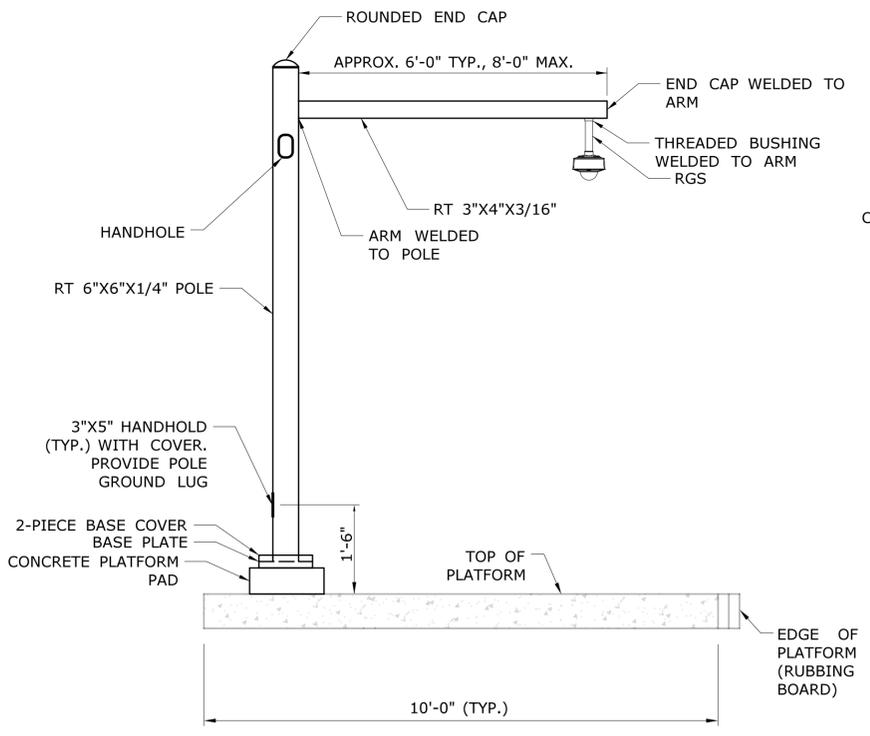
**1 CCTV POLE TYPE B**  
FCI-640 NOT TO SCALE



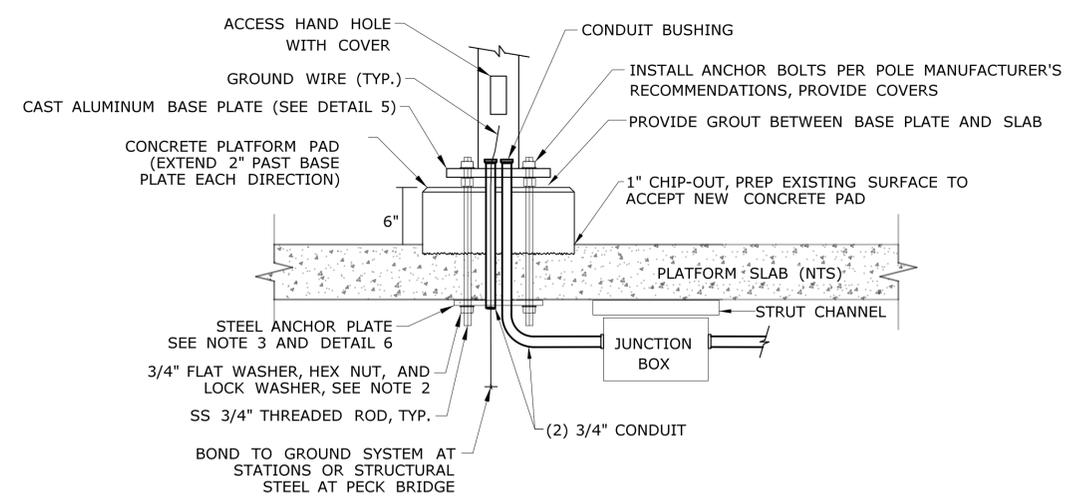
**2 CCTV POLE TYPE C**  
FCI-640 NOT TO SCALE



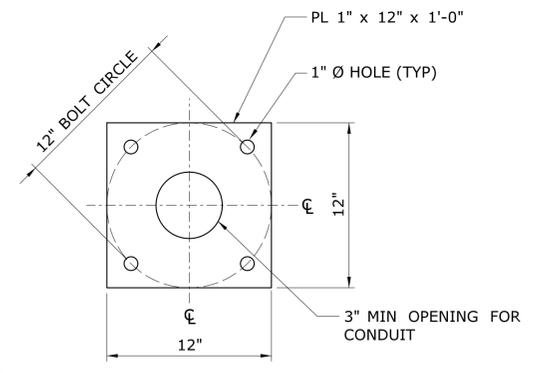
**5 CCTV POLE BASE PLATE**  
FCI-640 NOT TO SCALE



**3 CCTV POLE TYPE D**  
FCI-640 NOT TO SCALE

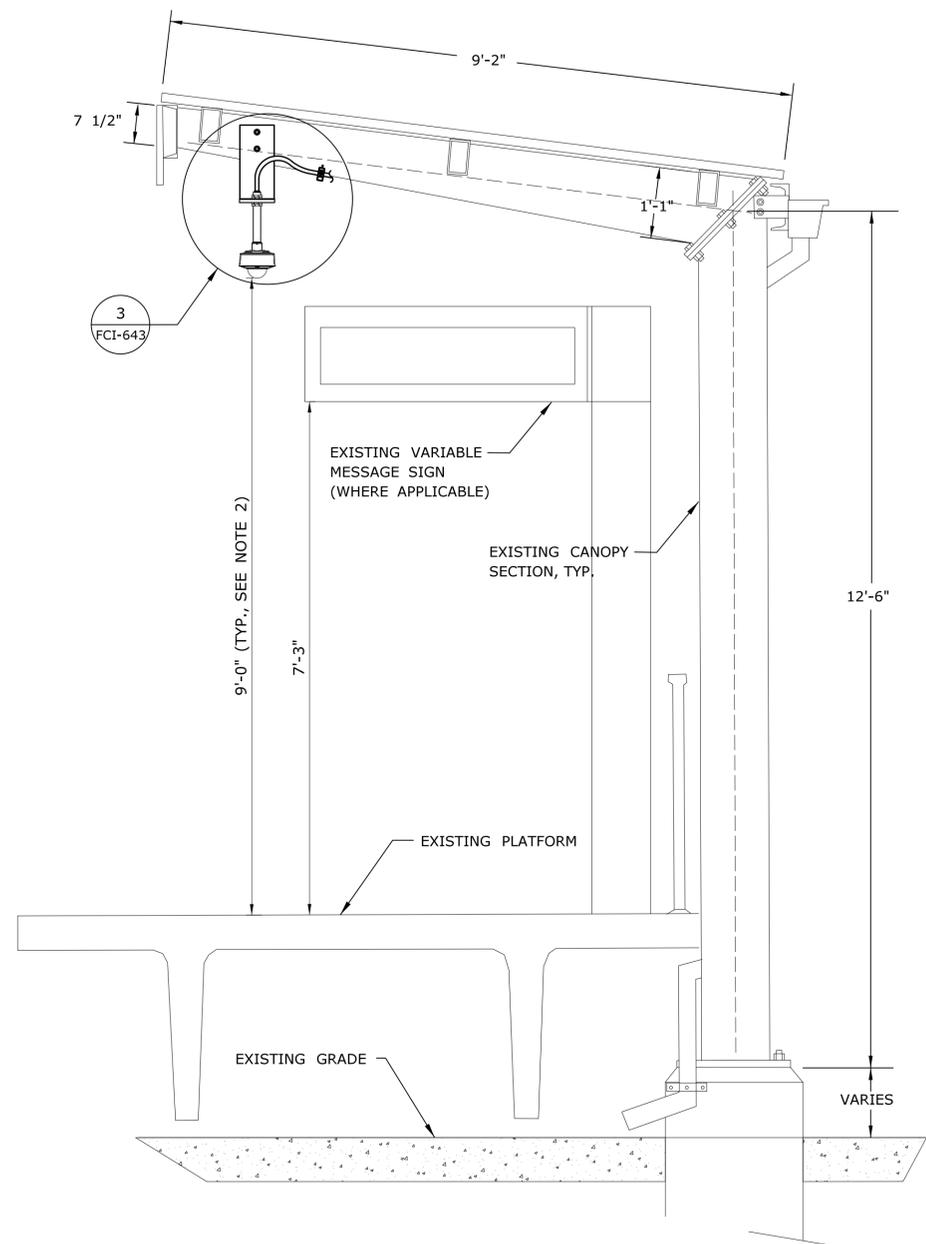


**4 STATION PLATFORM POLE ATTACHMENT**  
FCI-640 NOT TO SCALE

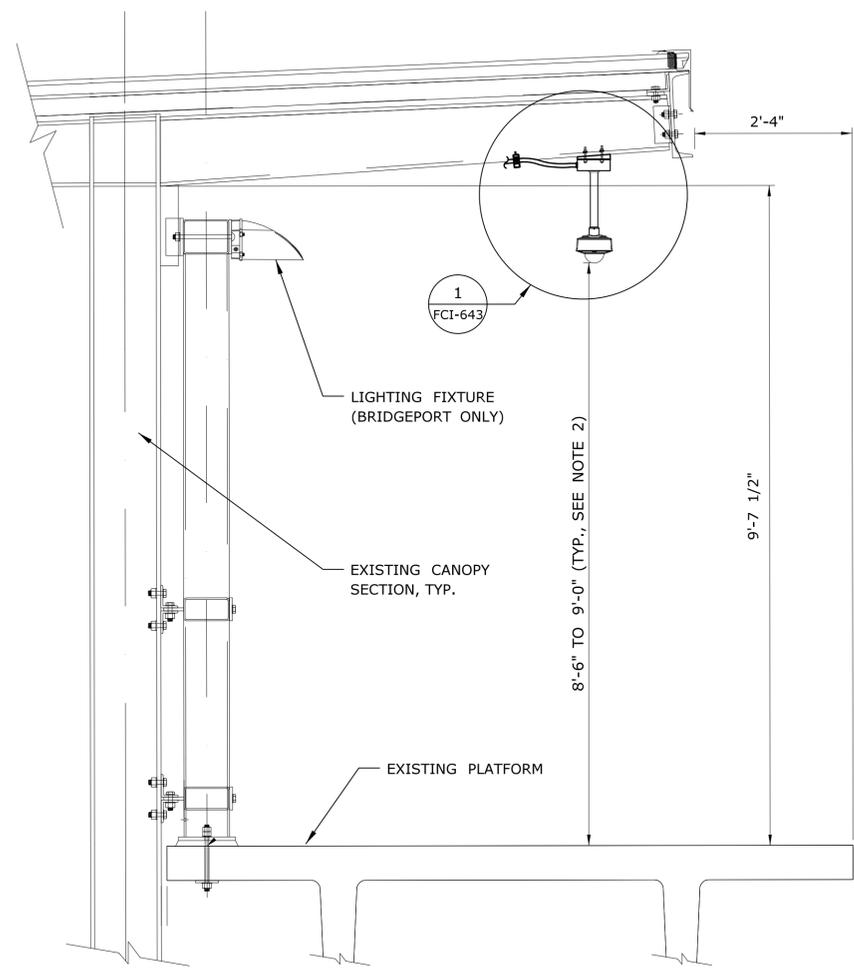


**6 CCTV POLE ANCHOR PLATE**  
FCI-640 NOT TO SCALE

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



**1 STRATFORD STATION CANOPY MOUNT DETAIL**  
 FCI-641 NOT TO SCALE

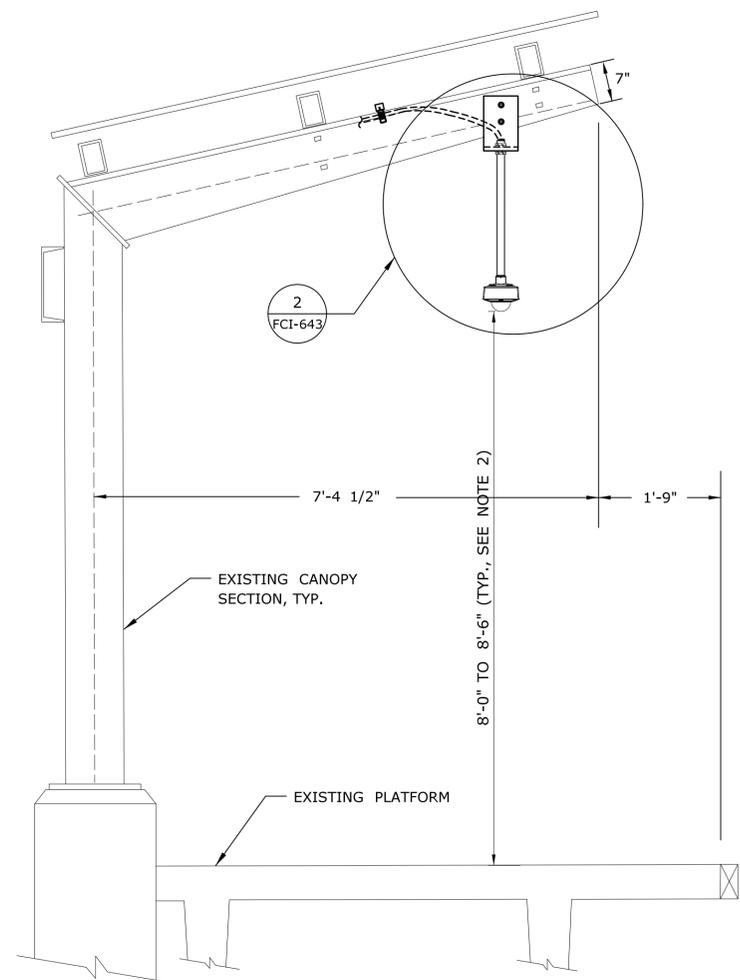


**2 BRIDGEPORT, FAIRFIELD, AND SOUTHPORT STATION CANOPY MOUNT DETAIL**  
 FCI-641 NOT TO SCALE

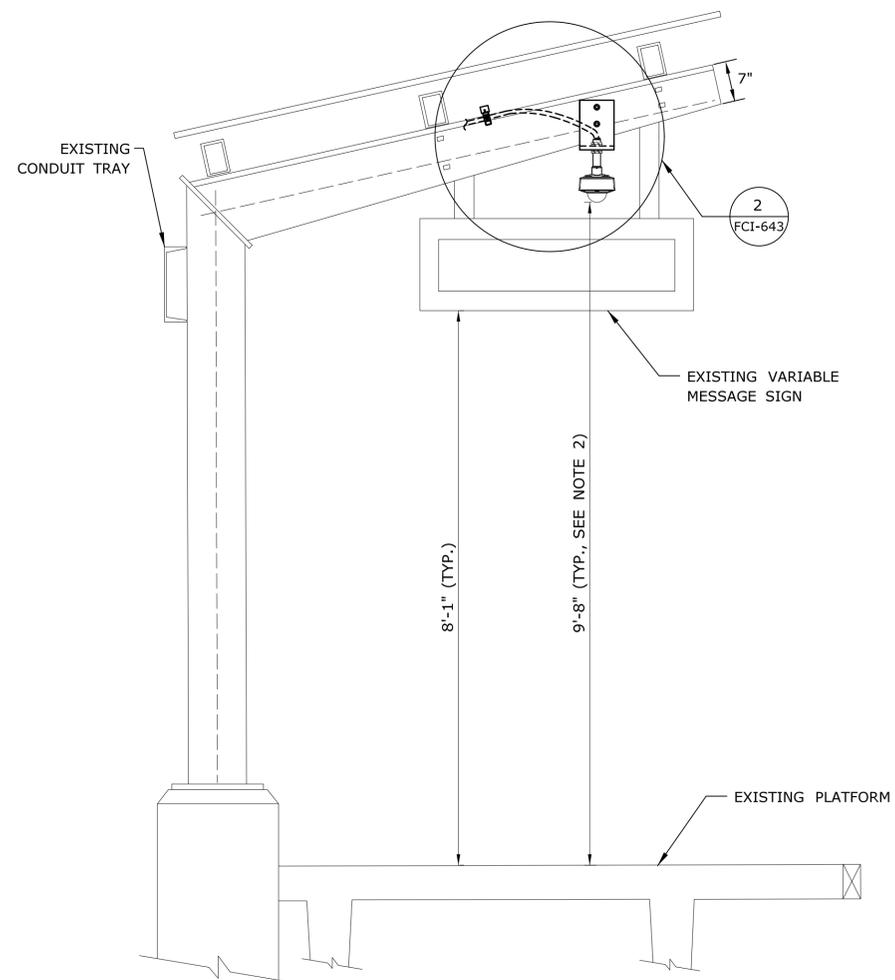
**NOTES:**

1. ALL ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL.
2. DIMENSION SHOWN IS TYPICAL. REFER TO CAMERA SCHEDULES FOR APPROXIMATE CAMERA MOUNTING HEIGHTS OF EACH CAMERA. ALL MOUNTING HEIGHTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO FABRICATION OF MOUNTS.
3. DETAILS ARE TYPICAL AND MAY VARY BY LOCATION. VERIFY ALL EXISTING CONDITIONS.
4. AT BRIDGEPORT STATION, NEW VARIABLE MESSAGE SIGNS AND STATIC STATION SIGNAGE WILL BE INSTALLED AS PART OF THE BRIDGEPORT STATION IMPROVEMENTS PROJECT (BY OTHERS). CONTRACTOR SHALL COORDINATE ALL CAMERA MOUNTING WITH NEW SIGNS. ENSURE CAMERA VIEWS ARE NOT OBSTRUCTED AND CAMERAS DO NOT OBSTRUCT SIGNS.
5. STEEL PLATES SHALL BE PAINTED TO MATCH EXISTING CANOPY. SUBMIT COLOR TO ENGINEER FOR APPROVAL.

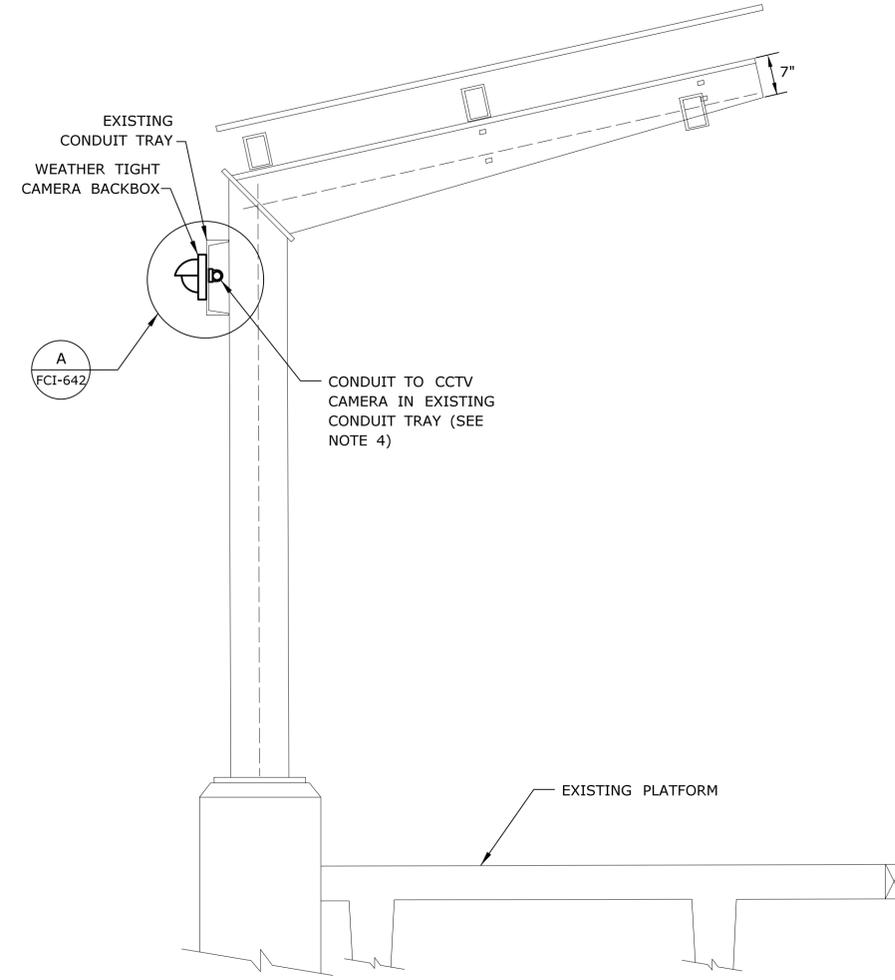
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/MN</b> CHECKED BY: <b>CH</b> SCALE AS NOTED	<b>STATE OF CONNECTICUT</b> <b>DEPARTMENT OF TRANSPORTATION</b> Filename: ...FCI-641_FA_Sheet_0300-0178.dgn	SIGNATURE/ BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE          UPGRADE FOR SECURITY          NEW HAVEN LINE          PHASE 2</b>	TOWN: <b>WESTPORT          TO STRATFORD</b> DRAWING TITLE: <b>CCTV MOUNTING          DETAILS SHEET 2 OF 5</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-641</b> SHEET NO. <b>06.022</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



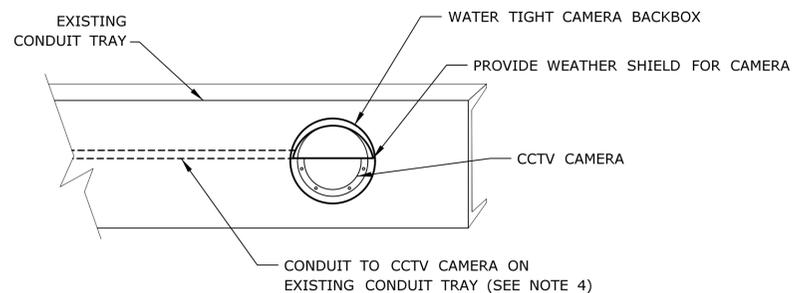
**1 FAIRFIELD METRO STATION CANOPY MOUNT DETAIL**  
FCI-642 NOT TO SCALE



**2 FAIRFIELD METRO STATION CANOPY MOUNT DETAIL WITH SIGN**  
FCI-642 NOT TO SCALE



**3 FAIRFIELD METRO REAR CANOPY MOUNT**  
FCI-642 NOT TO SCALE

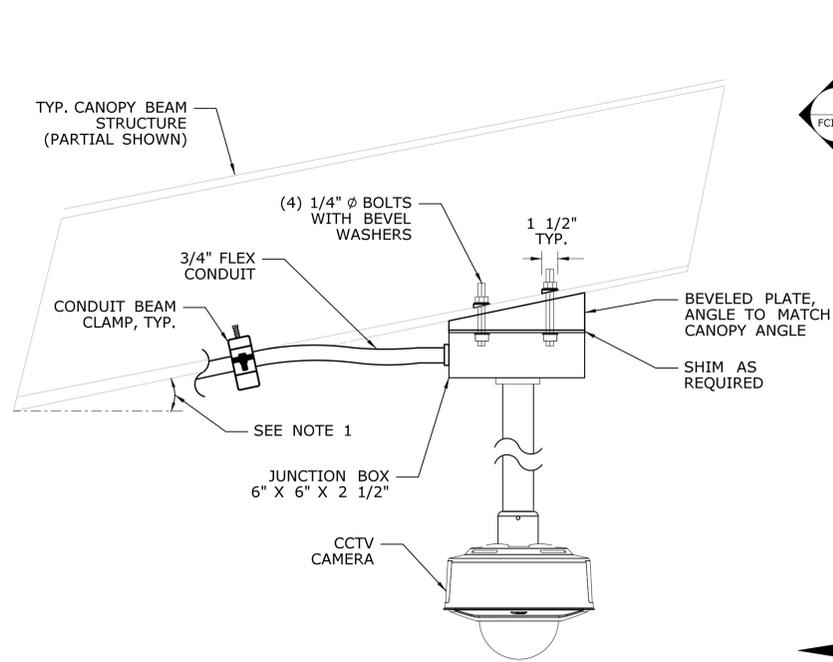


**A REAR OF CANOPY (FRONT OF CAMERA)**  
NOT TO SCALE

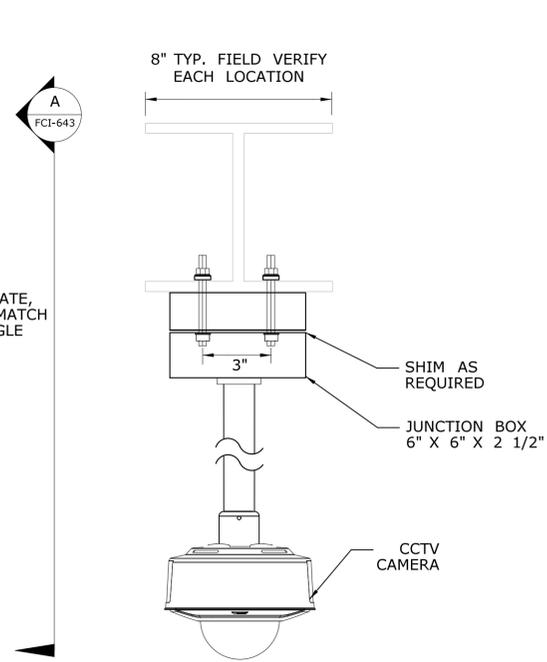
**NOTES:**

1. ALL ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL.
2. DIMENSIONS SHOWN ARE TYPICAL. REFER TO CAMERA SCHEDULES FOR APPROXIMATE MOUNTING HEIGHT OF EACH CAMERA. ALL MOUNTING HEIGHTS SHALL BE COORDINATED IN THE FIELD BY THE CONTRACTOR PRIOR TO FABRICATION OF MOUNTS.
3. DETAILS ARE TYPICAL AND MAY VARY BY LOCATION. VERIFY ALL EXISTING CONDITIONS.
4. RUN CONDUIT IN CONDUIT TRAY. IF SPACE IS NOT AVAILABLE, CONDUIT MAY RUN ON TOP OR OUTSIDE OF CONDUIT TRAY.
5. STEEL PLATES SHALL BE PAINTED TO MATCH EXISTING CANOPY. SUBMIT COLOR TO ENGINEER FOR APPROVAL.

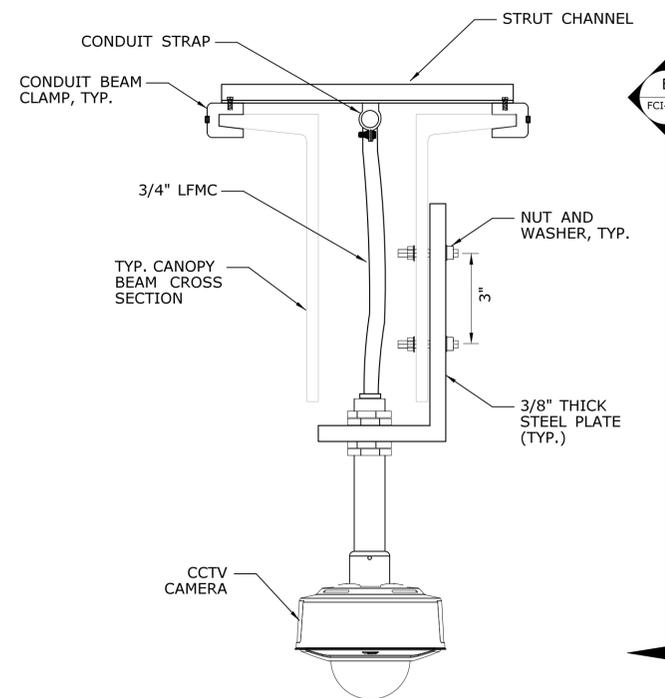
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/MN</b> CHECKED BY: <b>CH</b> SCALE AS NOTED	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-642_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b> DRAWING TITLE: <b>CCTV MOUNTING DETAILS SHEET 3 OF 5</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-642</b> SHEET NO. <b>06.023</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



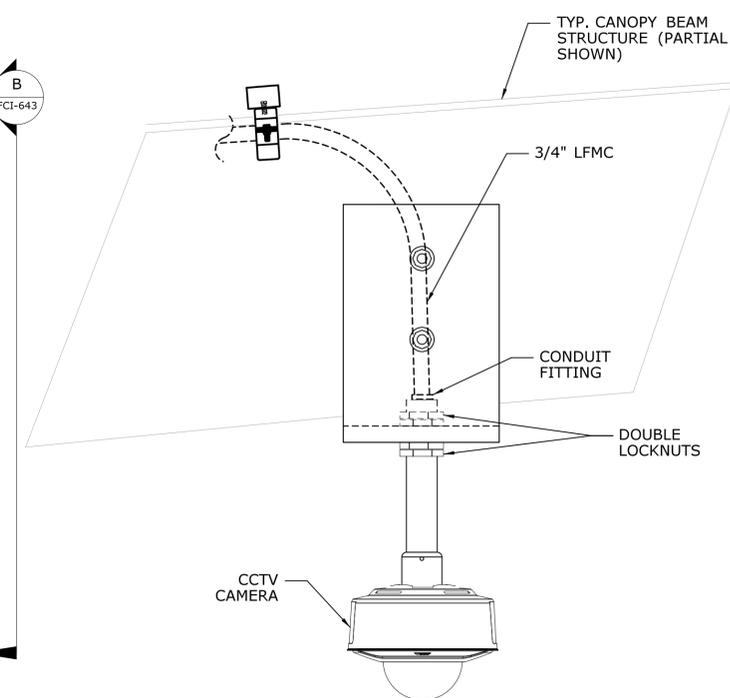
**1 CANOPY BEAM MOUNT - BRIDGEPORT, FAIRFIELD, AND SOUTHPORT STATIONS**  
FCI-643 NOT TO SCALE



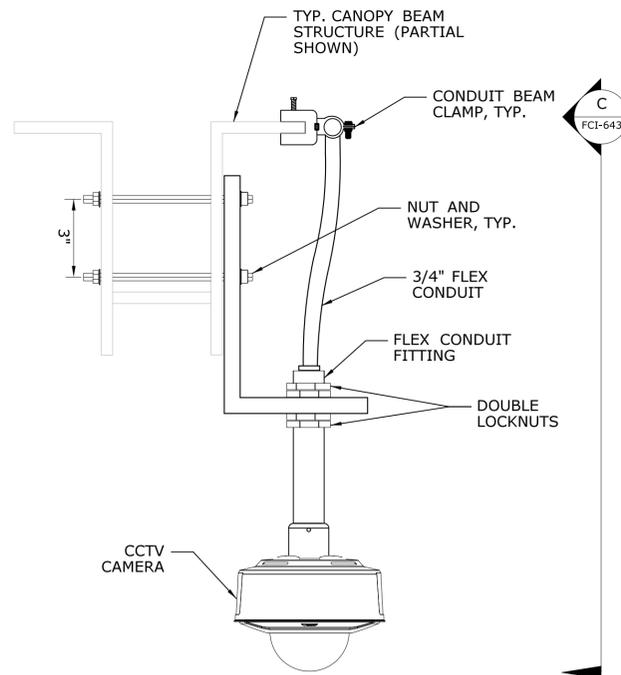
**A FRONT VIEW**  
NOT TO SCALE



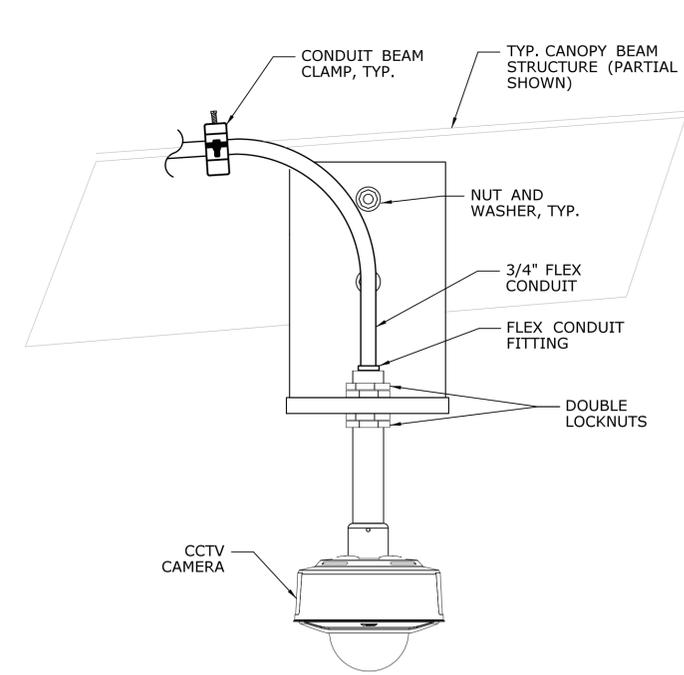
**2 CANOPY BEAM MOUNT - FAIRFIELD METRO STATION**  
FCI-643 NOT TO SCALE



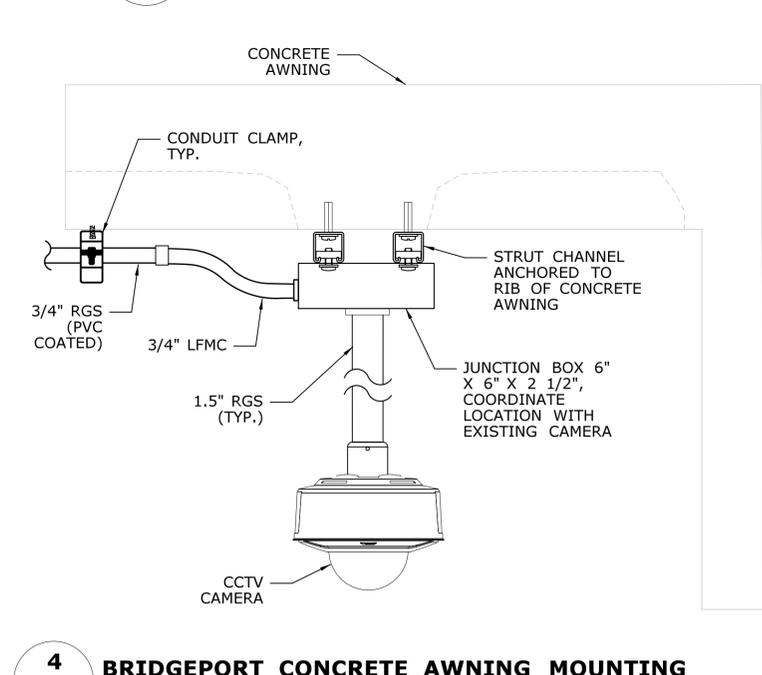
**B SIDE VIEW**  
NOT TO SCALE



**3 CANOPY BEAM MOUNT - STRATFORD STATION**  
FCI-643 NOT TO SCALE



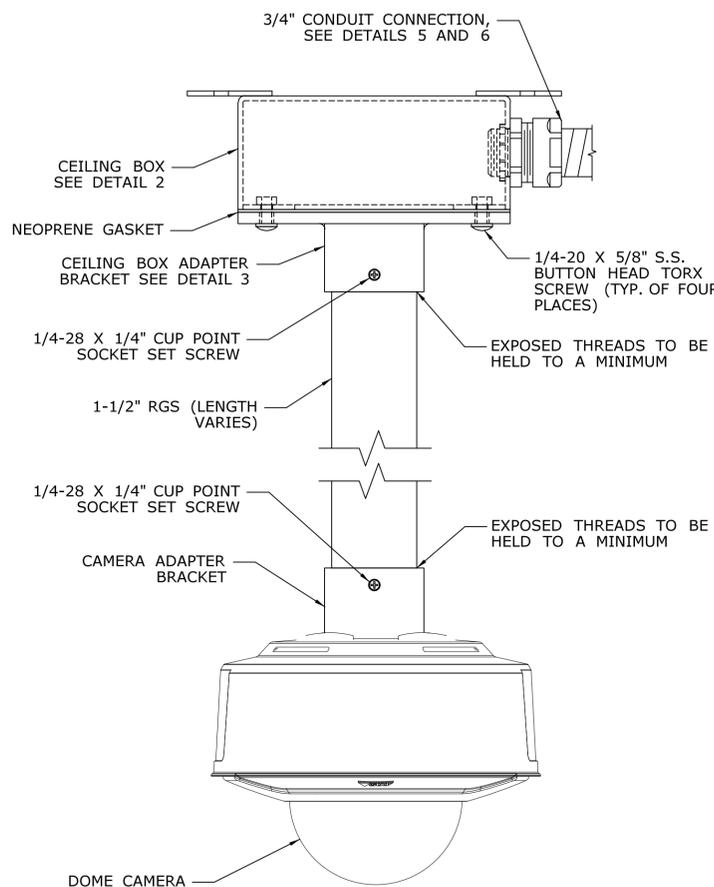
**C FRONT VIEW**  
NOT TO SCALE



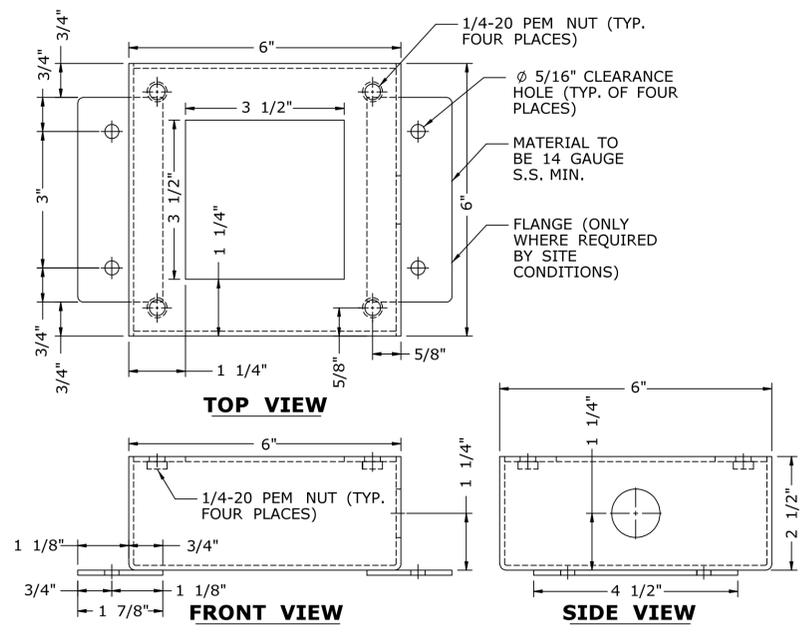
**4 BRIDGEPORT CONCRETE AWNING MOUNTING**  
FCI-643 NOT TO SCALE

- NOTES:**
- CONTRACTOR SHALL VERIFY EXACT ANGLE AT EACH LOCATION. FOR BRIDGEPORT STATION CANOPY, THE ANGLE IS APPROXIMATELY 3.9 DEGREES. FOR FAIRFIELD AND SOUTHPORT STATION CANOPIES, THE ANGLE IS APPROXIMATELY 5.25 DEGREES.
  - CCTV CAMERAS MOUNTED TO CANOPY SHALL BE MOUNTED AS CLOSE TO CANOPY EDGE AS POSSIBLE WHILE MAINTAINING CLEARANCE FROM THE TRAIN ENVELOPE AND DESIRED MOUNTING HEIGHT ABOVE PLATFORM, AS SHOWN ON CAMERA SCHEDULES. COORDINATE ALL CAMERA LOCATIONS WITH FIELD CONDITIONS.
  - DETAILS ARE TYPICAL. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS INCLUDING MATERIALS, DIMENSIONS, DETAILS, AND SECTIONS COORDINATED WITH FIELD CONDITIONS.
  - STEEL PLATES SHALL BE PAINTED TO MATCH EXISTING CANOPY. SUBMIT COLOR TO ENGINEER FOR APPROVAL.

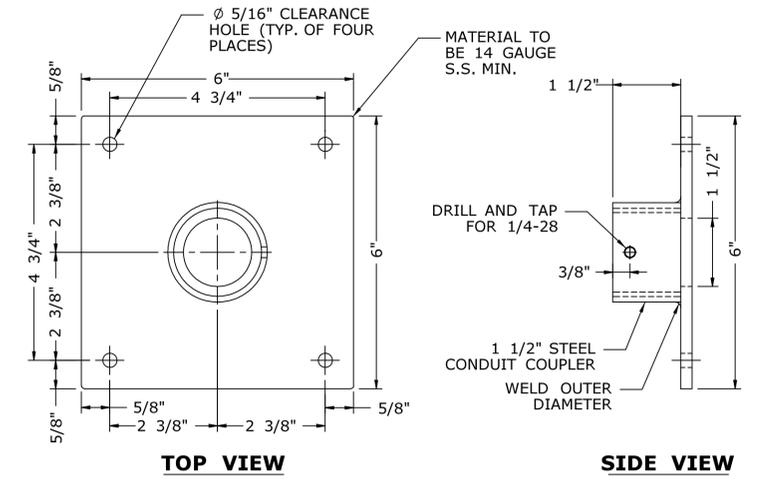
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/GH</b> CHECKED BY: <b>CH</b> SCALE AS NOTED	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-643_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b>	PROJECT NO.: <b>300-0178</b> DRAWING NO.: <b>FCI-643</b> SHEET NO.: <b>06.024</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



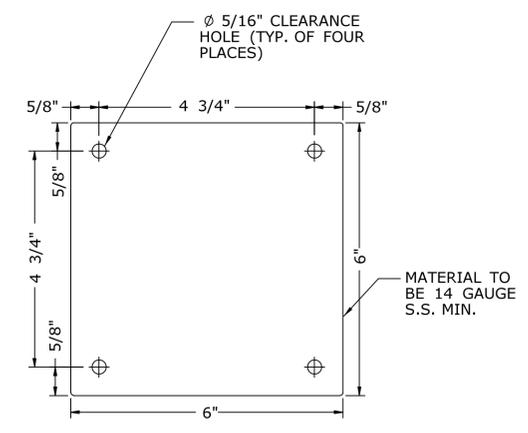
**1 PENDANT MOUNT ASSEMBLY DETAIL**  
FCI-644 NOT TO SCALE



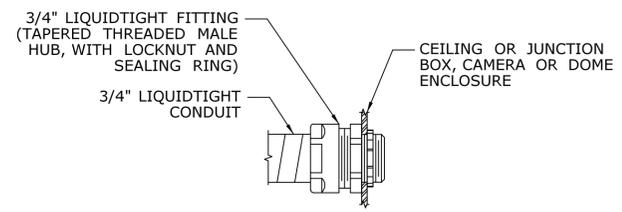
**2 PENDANT MOUNT ASSEMBLY JUNCTION BOX DETAILS**  
FCI-644 NOT TO SCALE



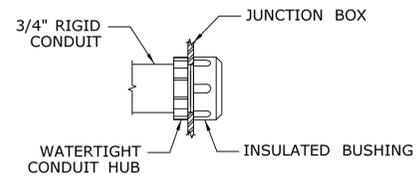
**3 PENDANT MOUNT ASSEMBLY ADAPTOR BRACKET**  
FCI-644 NOT TO SCALE



**4 JUNCTION BOX COVER PLATE**  
FCI-644 NOT TO SCALE



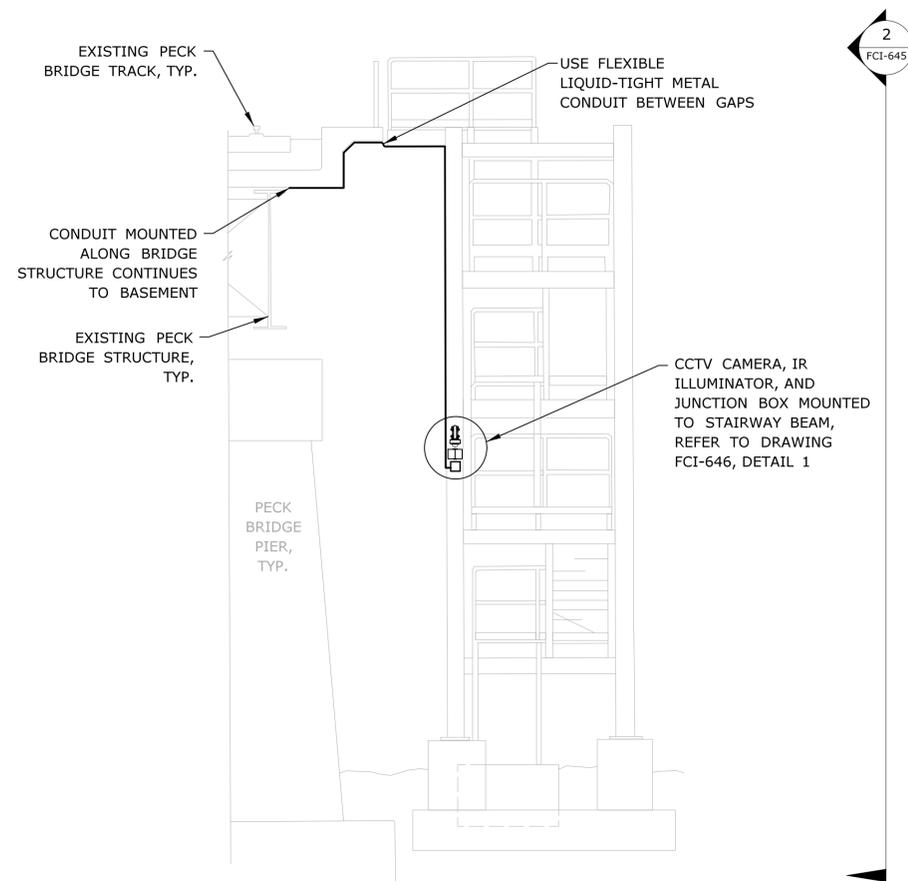
**5 TYP. LIQUIDTIGHT CONDUIT CONNECTION**  
FCI-644 NOT TO SCALE



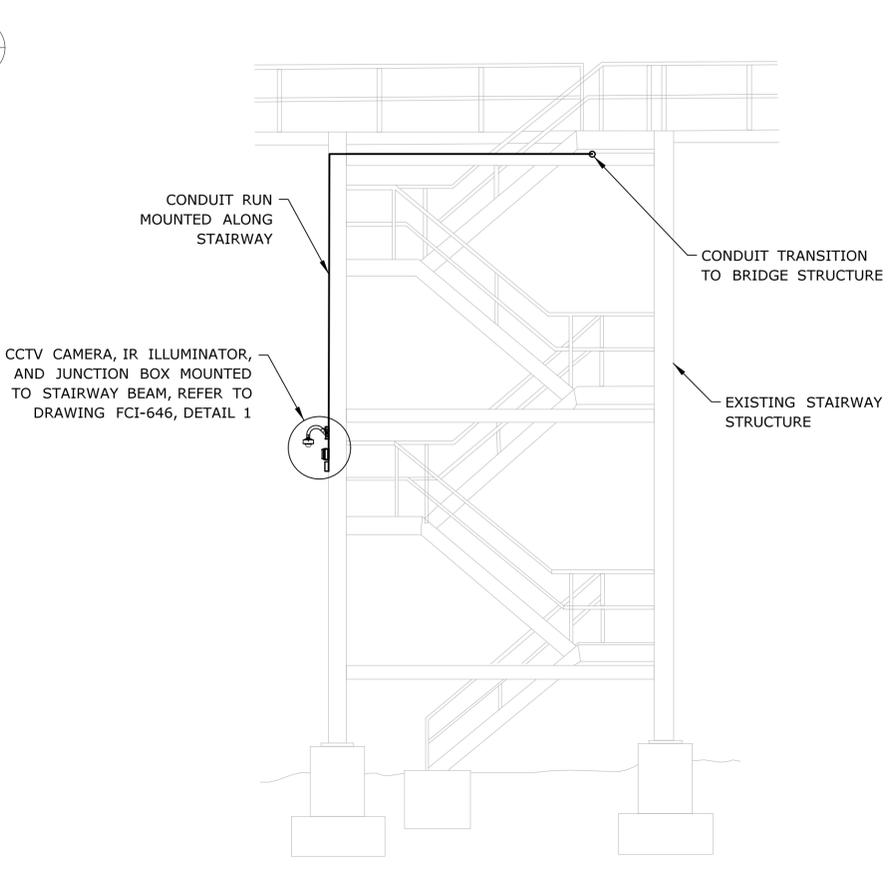
**6 TYP. RIGID CONDUIT CONNECTION**  
FCI-644 NOT TO SCALE

**NOTES:**  
1. DETAILS ARE TYPICAL. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS INCLUDING MATERIALS, DIMENSIONS, DETAILS, AND SECTIONS COORDINATED WITH ALL FIELD CONDITIONS.

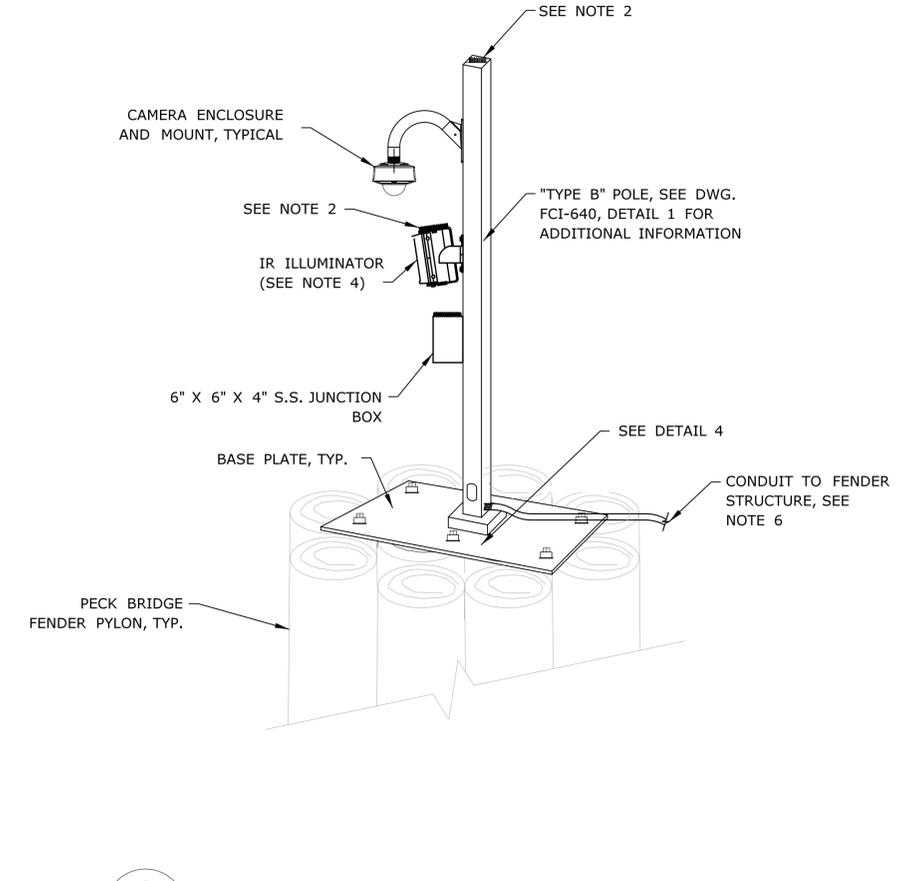
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/GH</b> CHECKED BY: <b>CH</b> SCALE AS NOTED	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-644_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b> DRAWING TITLE: <b>CCTV MOUNTING DETAILS SHEET 5 OF 5</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-644</b> SHEET NO. <b>06.025</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016			



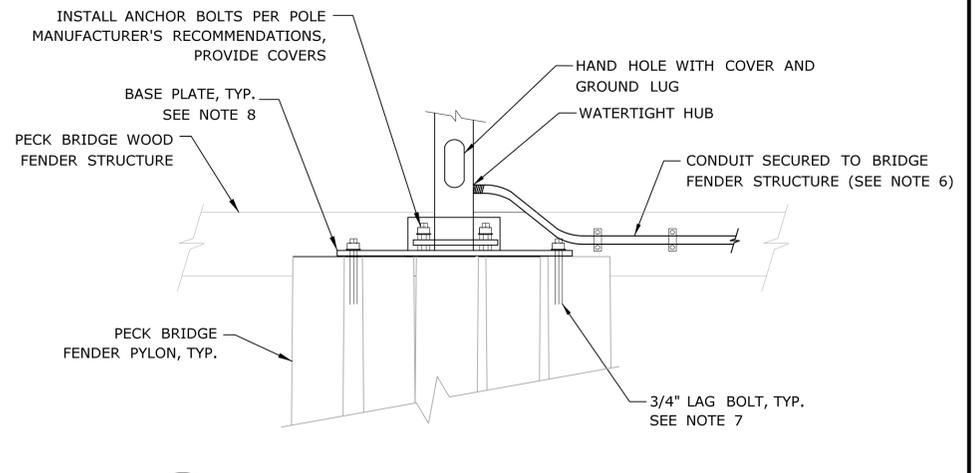
**1 BRIDGE ACCESS STAIRWAY WEST ELEVATION**  
FCI-645 NOT TO SCALE



**2 BRIDGE ACCESS STAIRWAY SOUTH ELEVATION**  
FCI-645 NOT TO SCALE



**3 PECK BRIDGE FENDER POLE MOUNT**  
FCI-645 NOT TO SCALE

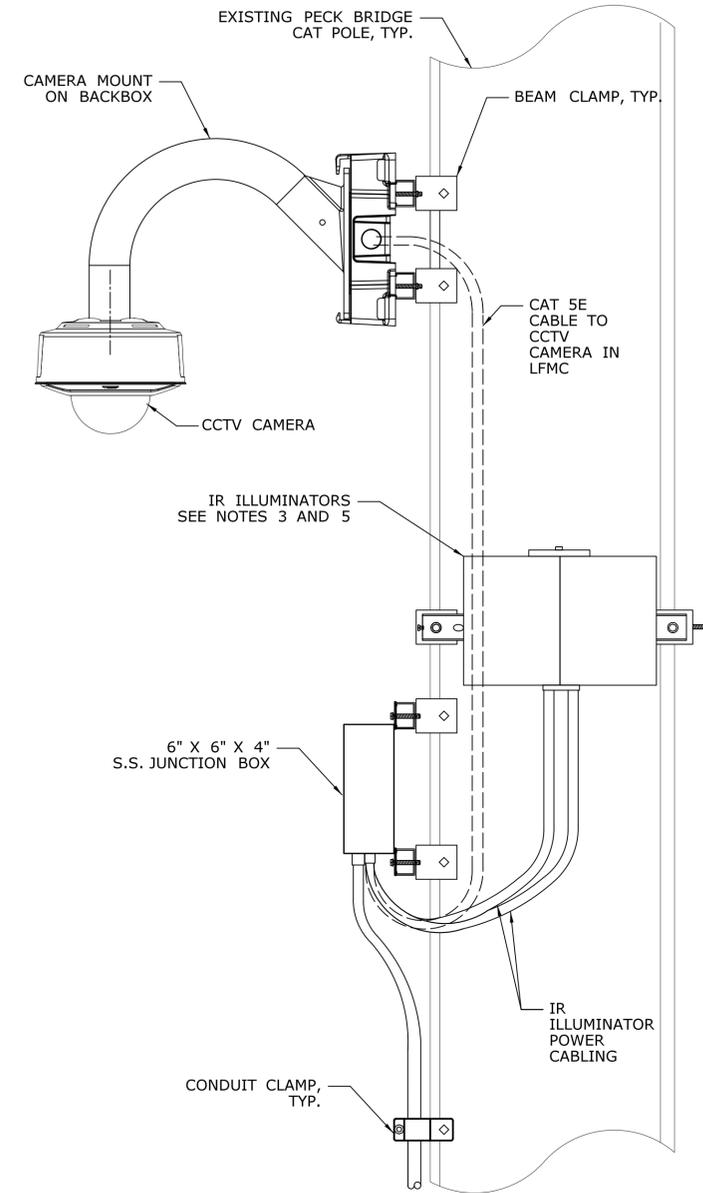
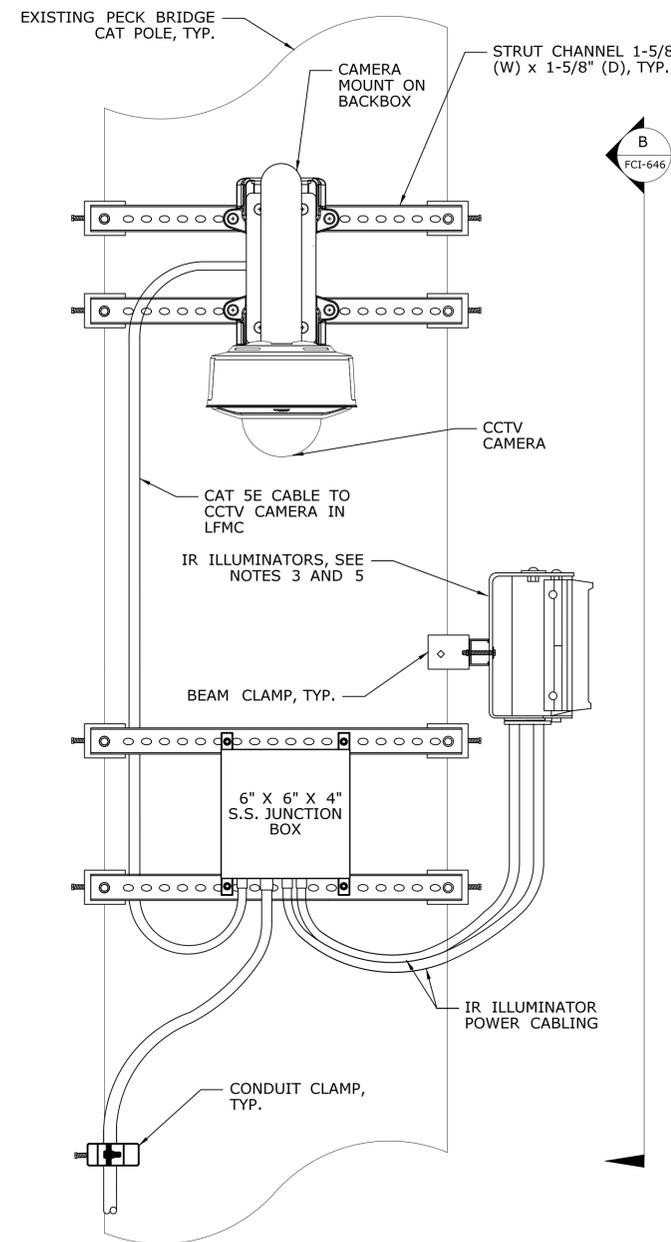
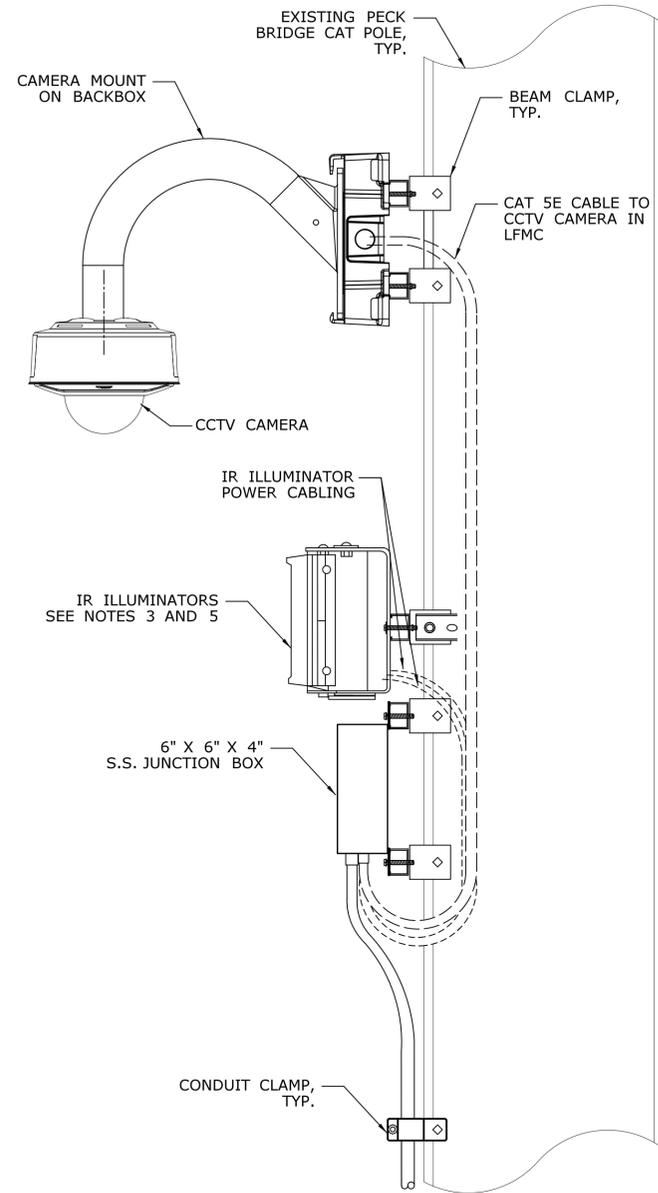
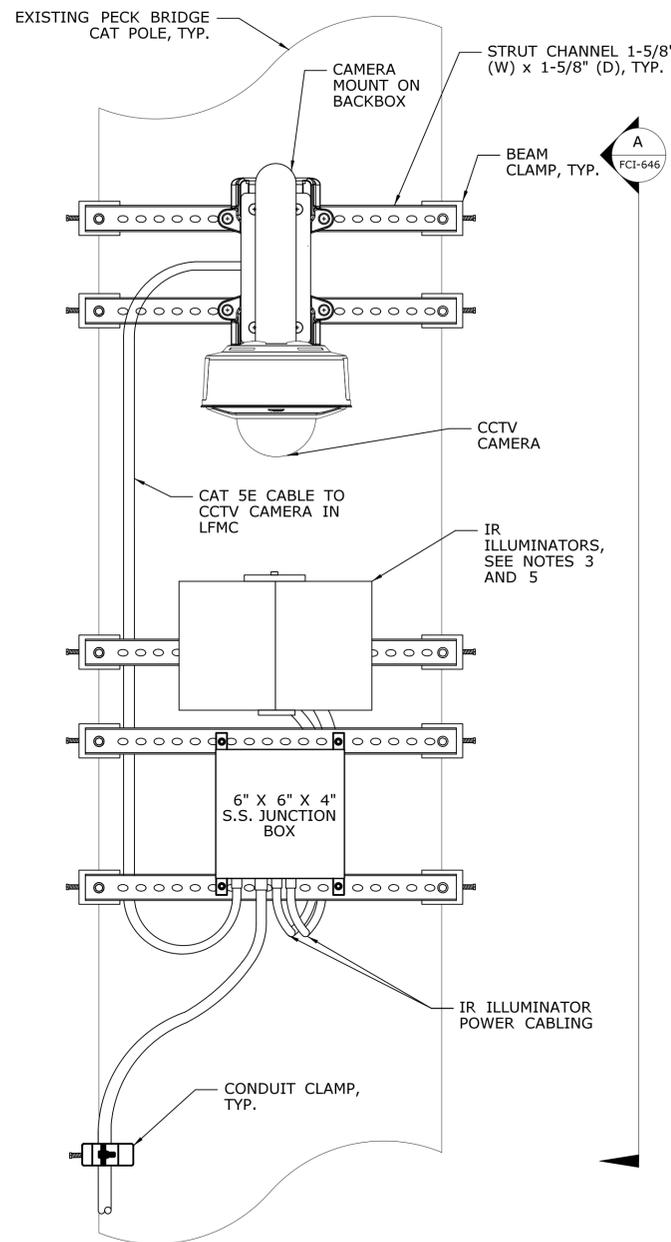


**4 PECK BRIDGE FENDER POLE ATTACHMENT**  
FCI-645 NOT TO SCALE

**NOTES:**

1. ALL ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL.
2. THE CONTRACTOR SHALL PROVIDE BIRD DETERRENT SPIKES ON THE PECK BRIDGE CCTV CAMERAS AND JUNCTION BOXES AS SHOWN AND AS DESCRIBED IN THE SPECIFICATIONS.
3. ALL CABLES SHALL BE IN CONDUITS.
4. PROVIDE TWO (2) IR UNITS AT FIXED CAMERA LOCATIONS. PROVIDE THREE (3) IR UNITS AT PTZ LOCATIONS.
5. DETAILS ARE TYPICAL. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS INCLUDING MATERIALS, DIMENSIONS, DETAILS, AND SECTIONS COORDINATED WITH ALL FIELD CONDITIONS.
6. CONDUIT FOR GROUND CABLE NOT SHOWN. PROVIDE 3/4" CONDUIT WITH (1)#4 GROUND. GROUND TO NEAREST STRUCTURAL STEEL.
7. A MINIMUM OF 4 LAG BOLTS SHALL BE USED TO ANCHOR CCTV POLE SYSTEM. SOME LOCATIONS MAY REQUIRED MORE RODS DEPENDING ON TIMBER PILE ARRANGEMENT.
8. BROAD BASE PLATE SHALL BE A MINIMUM 1 1/2" THICK. DIMENSIONS OF THE PLATE MAY VARY DEPENDING ON TIMBER PILE ARRANGEMENT.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: <b>EN/MN</b> CHECKED BY: <b>CH</b> NOT TO SCALE	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-645_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-645</b> SHEET NO. <b>06.026</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/31/2016	DRAWING TITLE: <b>PECK BRIDGE CCTV MOUNTING DETAILS SHEET 1 OF 2</b>		



**1** PECK BRIDGE BEAM MOUNT DETAIL - TYPE 1  
 FCI-646 NOT TO SCALE (FRONT FACING TOWARD TRAIN)

**A** SIDE VIEW  
 NOT TO SCALE

**2** PECK BRIDGE BEAM MOUNT DETAIL - TYPE 2  
 FCI-646 NOT TO SCALE (SIDE FACING)

**B** SIDE VIEW  
 NOT TO SCALE

**NOTES:**

1. MINIMUM CONDUIT SIZE SHALL BE 3/4".
2. BOLTS, WASHERS, AND ALL OTHER MOUNTING HARDWARE AT PECK BRIDGE SHALL BE STAINLESS STEEL. STRUT CHANNEL SHALL BE STAINLESS STEEL OR PVC COATED.
3. COORDINATE IR LOCATION WITH CAMERA VIEWS. ENSURE IR DOES NOT BLIND ANY NEARBY CAMERA.
4. ALL CABLES ARE IN CONDUITS.
5. PROVIDE TWO (2) IR UNITS AT FIXED CAMERA LOCATIONS. PROVIDE THREE (3) IR UNITS AT PTZ CAMERA LOCATIONS.
6. DETAILS ARE TYPICAL. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS INCLUDING MATERIALS, DIMENSIONS, DETAILS, AND SECTIONS COORDINATED WITH ALL FIELD CONDITIONS.
7. MOUNTING WILL VARY DEPENDING ON ORIENTATION OF EXISTING BEAM FLANGE. COORDINATE MOUNTING WITH SITE CONDITIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: **EN/GH**  
 CHECKED BY: **CH**  
 SCALE AS NOTED

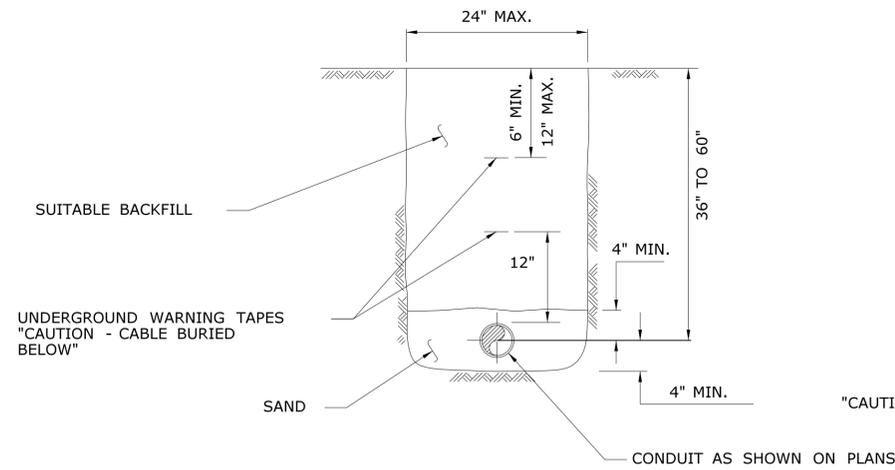
  
**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**  
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SIGNATURE/BLOCK:  
  
 STV Incorporated  
 185 Plains Road  
 Suite 208E  
 Milford, CT 06461

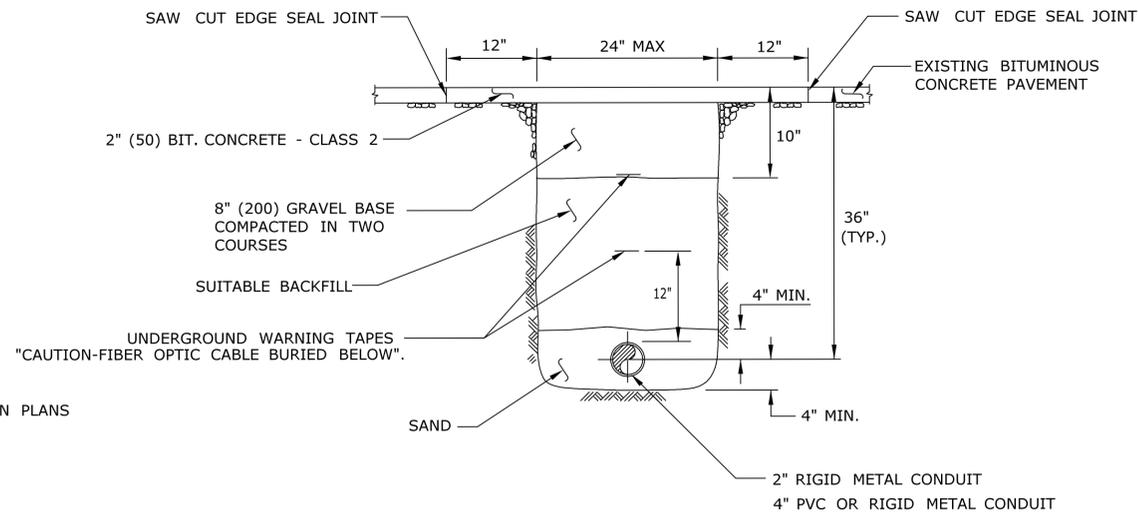
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**NETWORK INFRASTRUCTURE  
 UPGRADE FOR SECURITY  
 NEW HAVEN LINE  
 PHASE 2**

TOWN: **WESTPORT  
 TO STRATFORD**  
 DRAWING TITLE:  
**PECK BRIDGE CCTV MOUNTING  
 DETAILS SHEET 2 OF 2**

PROJECT NO. **300-0178**  
 DRAWING NO. **FCI-646**  
 SHEET NO. **06.027**

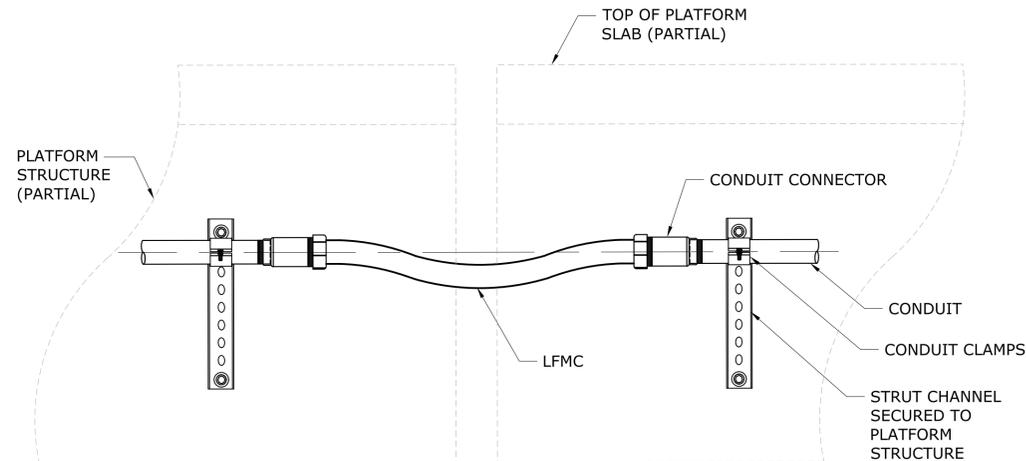


**1 CONDUIT TRENCHING DETAILS**  
FCI-650 NOT TO SCALE

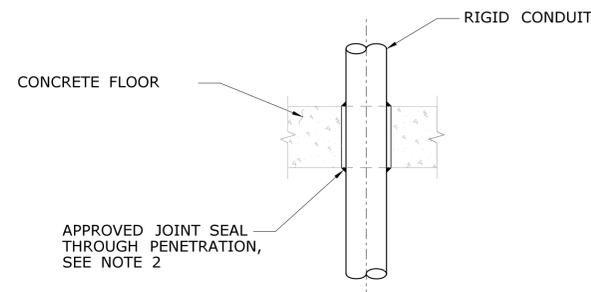


**2 CONDUIT UNDER BITUMINOUS CONCRETE SIDEWALK OR DRIVEWAY**  
FCI-650 NOT TO SCALE

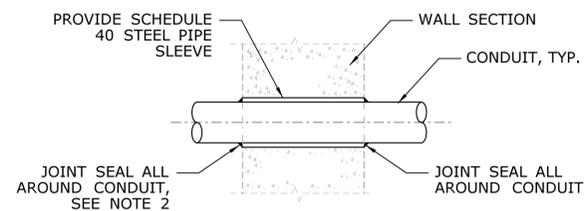
- NOTES:**
- SEE CONNECTICUT DOT STANDARD TRENCHING DETAILS, HIGHWAY OPERATIONS SHEET IMS-05.
  - PENETRATIONS SHALL USE APPROVED FIRESTOP SEALANT AS REQUIRED BY NESC, NFPA, OR LOCAL REQUIREMENTS.
  - DETAIL FOR USE AT LOCATIONS WHERE CONDUITS ARE SUBJECT TO DEFLECTION OR WHEN STANDARD EXPANSION FITTING CANNOT BE USED. PROVIDE BONDING CABLE BETWEEN METAL CONDUIT SECTIONS FOR CONTINUOUS GROUND.
  - SEE ADDITIONAL NOTES ON DWG. FCI-651.



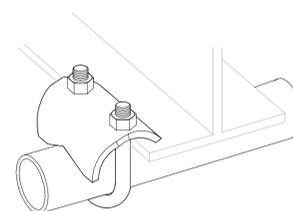
**3 CONDUIT DEFLECTION DETAILS**  
FCI-650 NOT TO SCALE SEE NOTE 3



**4 FLOOR PENETRATION DETAIL**  
FCI-650 NOT TO SCALE

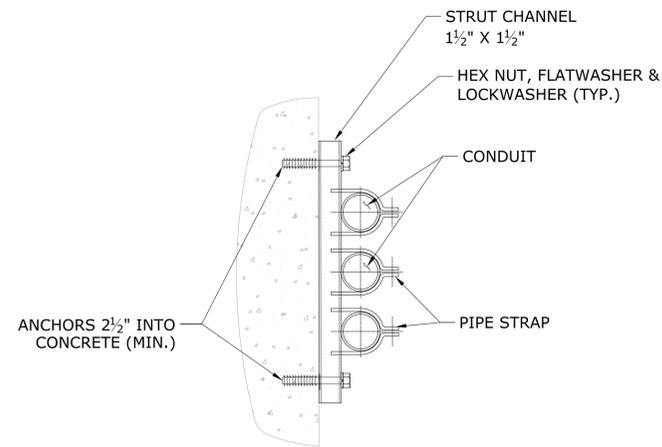


**5 WALL PENETRATION DETAIL**  
FCI-650 NOT TO SCALE

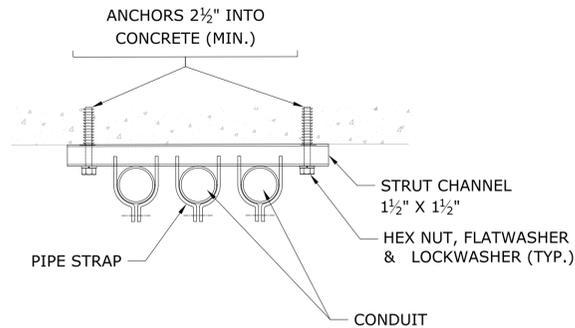


**6 TYP. BEAM CLAMP**  
FCI-650 NOT TO SCALE

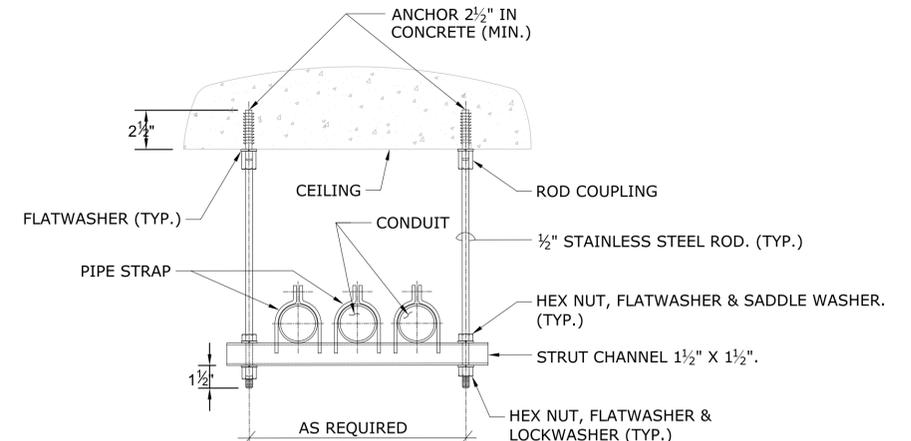
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/2/2016	DESIGNER/DRAFTER: <b>EN/GH</b>	CHECKED BY: <b>CH</b>	SCALE AS NOTED	<p><b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION</p> <p>STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461</p>	SIGNATURE/BLOCK:	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b>	DRAWING TITLE: <b>CONDUIT DETAILS SHEET 1 OF 2</b>	PROJECT NO. <b>300-0178</b>	DRAWING NO. <b>FCI-650</b>	SHEET NO. <b>06.028</b>
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**1** TYPICAL STRUT CHANNEL WALL MOUNT  
FCI-651 NOT TO SCALE



**2** TYPICAL STRUT CHANNEL CEILING MOUNT  
FCI-651 NOT TO SCALE



**3** TRAPEZE CONDUIT SUPPORT  
FCI-651 NOT TO SCALE

**NOTES:**

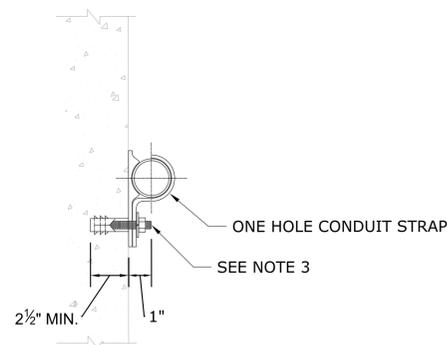
1. CONDUIT SYSTEMS SHALL BE ATTACHED TO THE EXISTING STRUCTURES CONFORMING TO THE FOLLOWING:
  - A. FIELD DRILL HOLES IN CONCRETE STRUCTURES. HOLE DIAMETER & ANCHOR DEPTH FOR THE ANCHORAGE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SELECT THE LARGEST DIAMETER ANCHOR THAT WILL FIT IN THE MOUNT BEING INSTALLED.
  - B. ANCHORS - SYSTEM APPROVED BY CONN. D.O.T. WITH THREADED RODS, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL.
  - C. SPACE STRAPS AT 60" MAXIMUM.
  - D. ONE HOLE STRAPS CAN ONLY BE USED WITH BACK STRAP.
2. STRAPS SHALL BE SECURED TO ANCHORS WITH LOCKWASHERS, FLAT WASHERS, AND NUTS.
3. ONE HOLE CONDUIT STRAP STUD LOCATION SHALL BE BELOW THE CONDUIT UNLESS FIELD CONDITIONS DICTATE OTHERWISE.
4. ANCHORS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A193(M), CLASS 2, GRADE B8M (TYPE 316).
5. NUTS SHALL BE NYLON INSERT LOCK NUTS AND CONFORM TO ASTM A194(M), CLASS 2, GRADE 8M, STRAIN HARDENED (TYPE 316).
6. WASHERS SHALL CONFORM TO ASTM A276(M), TYPE 316, ANNEALED.
7. MATERIALS FOR USE WITH RGS CONDUIT SYSTEMS:
 

CHANNEL:	STAINLESS STEEL
PIPE STRAPS:	STAINLESS STEEL
ONE HOLE STRAP:	HOT-DIPPED GALVANIZED MALLEABLE IRON

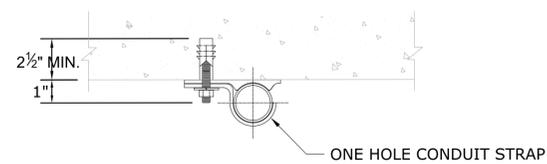
MATERIALS FOR USE WITH PVC COATED RGS CONDUIT SYSTEMS:

CHANNEL:	STAINLESS STEEL OR PVC COATED
PIPE STRAPS:	STAINLESS STEEL* OR PVC COATED
ONE HOLE STRAP:	PVC COATED MALLEABLE IRON

\*STAINLESS STEEL PIPE STRAPS MAY ONLY BE USED WITH STAINLESS STEEL CHANNEL AND SHALL NOT BE USED WITH PVC COATED CHANNEL.
8. ALL MOUNTING HARDWARE (NUTS, BOLTS, WASHERS, ETC.) SHALL BE STAINLESS STEEL.
9. ALL ITEMS SHALL BE COMPATIBLE TO FORM A COMPLETE CONDUIT SUPPORT SYSTEM IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.
10. ALL THREADED ROD CONNECTIONS TO BE INSULATED.
11. LONGITUDINAL AND TRANSVERSE BRACING SHALL BE ADDED TO TRAPEZE CONDUIT SUPPORTS ALONG THE RUN AS NECESSARY.



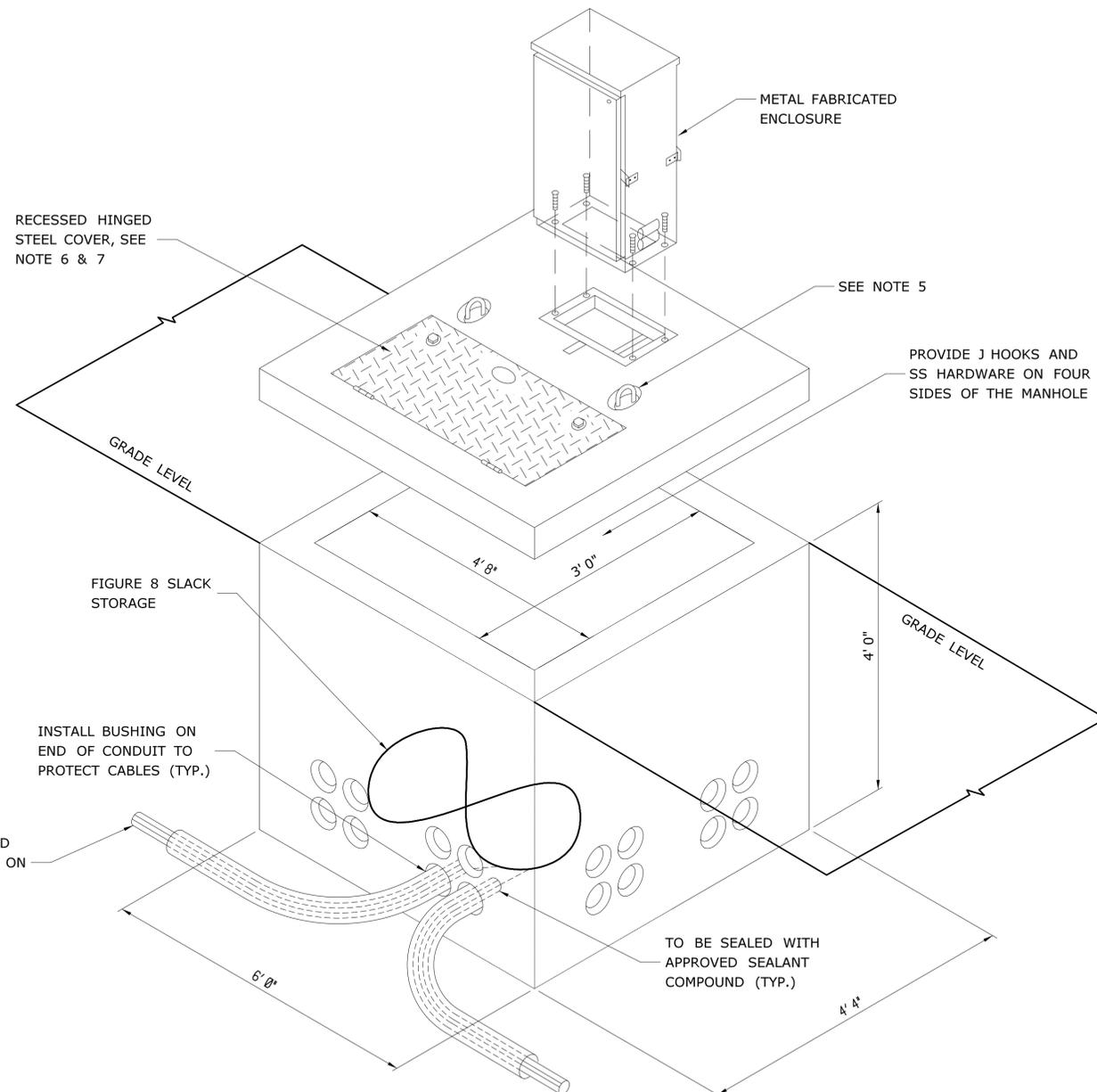
**4** INDIVIDUAL CONDUIT MOUNTING FOR VERTICAL SURFACES  
FCI-651 NOT TO SCALE SEE NOTE 1



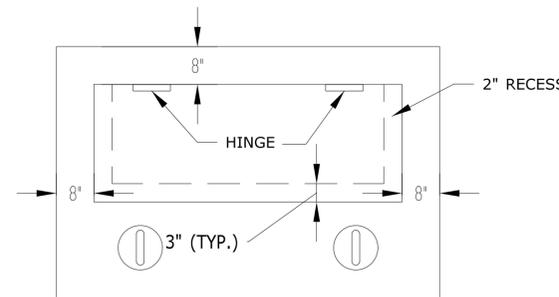
**5** INDIVIDUAL CONDUIT MOUNTING FOR HORIZONTAL SURFACES  
FCI-651 NOT TO SCALE SEE NOTE 1

TYPES OF WALL CONSTRUCTION	TYPES OF ANCHOR
CONCRETE WALL	STUD ANCHOR (WEDGE ANCHOR)
HOLLOW/CINDER BLOCK WALL	HEAVY DUTY DOUBLE EXPANSION BOLT ANCHORS

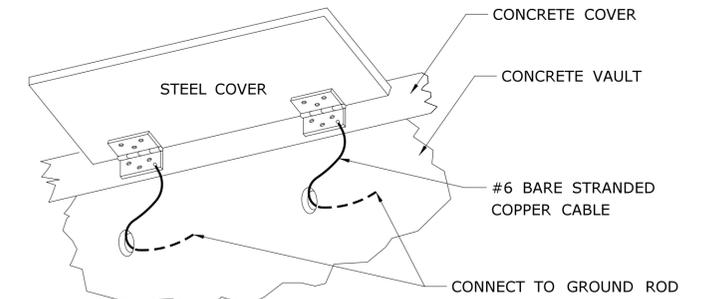
ANY OTHER TYPES OF WALL CONSTRUCTION WILL REQUIRE ENGINEER'S APPROVAL. SUBMIT ALL PRODUCTS TO THE ENGINEER FOR APPROVAL.



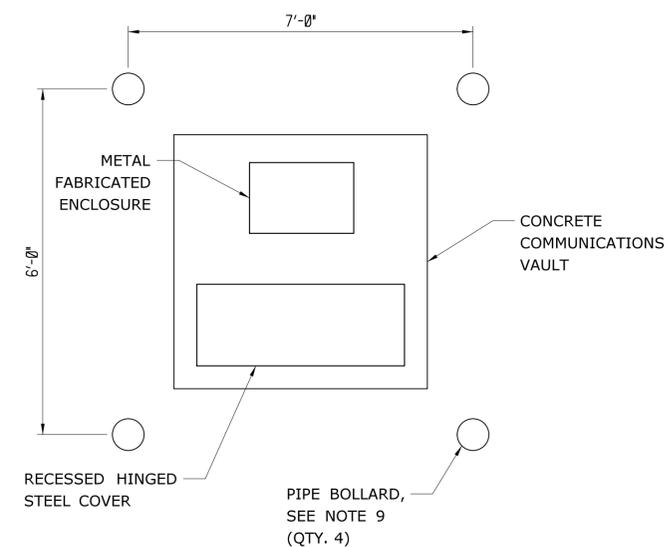
**1 CONCRETE COMMUNICATIONS VAULT**  
FCI-652 NOT TO SCALE



**2 COVER RECESS PLAN**  
FCI-652 NOT TO SCALE



**3 COVER GROUNDING**  
FCI-652 NOT TO SCALE



**4 TYP. BOLLARD PLACEMENT**  
FCI-652 NOT TO SCALE

**NOTES:**

- MINIMUM BENDING RADIUS OF CONDUITS TO BE MAINTAINED IN ACCORDANCE WITH CABLE SPECIFICATIONS.
- CONTRACTOR SHALL SUBMIT FINAL VAULT DESIGN, INCLUDING STEEL REINFORCEMENT, TO THE ENGINEER FOR APPROVAL.
- BOTTOM OF VAULT SHALL BE SOLID CONCRETE WITH A 12" SUMP AND 4" DRAIN HOLE.
- INSTALL 3/4" X 10' COPPER GROUND ROD THROUGH BOTTOM OF VAULT WITH 10" MIN EXPOSED.
- VAULTS INSTALLED IN AREAS WITH HIGH GROUND WATER SHALL HAVE THE BOTTOM PENETRATIONS REFERENCED IN NOTES 3 AND 4 ABOVE THOROUGHLY SEALED.
- TOP OF EYE TO BE FLUSH WITH TOP OF COVER.
- DESIGN VAULT AND COVER FOR E-80 LOADING.
- RECESSED HINGED STEEL COVER SHALL HAVE A CAST-IN LABEL "COMMUNICATIONS."
- SEE DETAIL 3 ON DWG. FCI-653 FOR BOLLARD DETAILS. COORDINATE FINAL BOLLARD LOCATIONS WITH EXISTING CONDITIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: **EN/GH**  
CHECKED BY: **CH**  
NOT TO SCALE

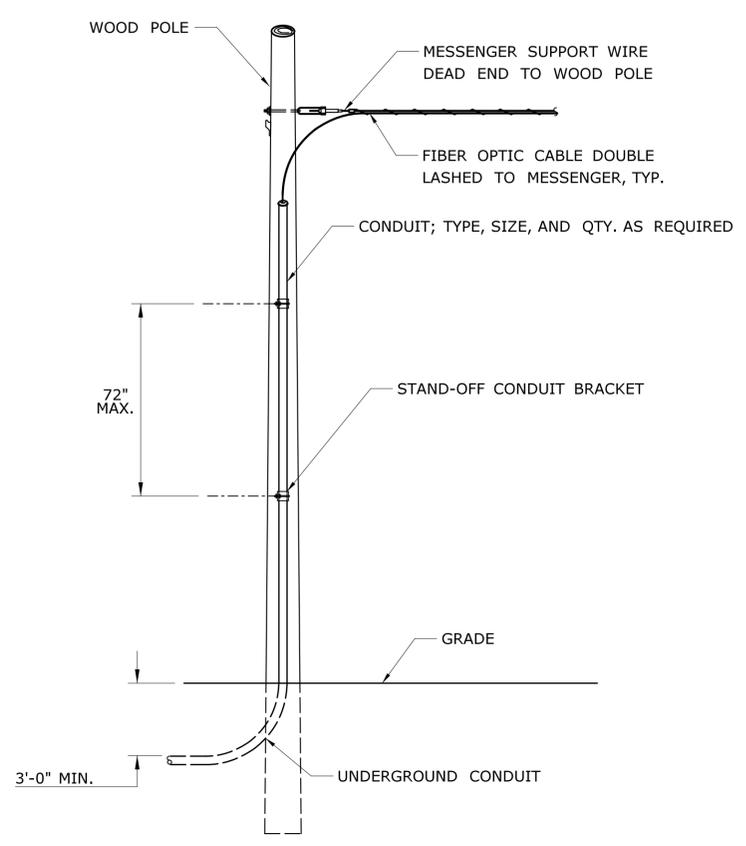
STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

SIGNATURE/BLOCK: [Signature]  
STV Incorporated  
185 Plains Road  
Suite 208E  
Milford, CT 06461

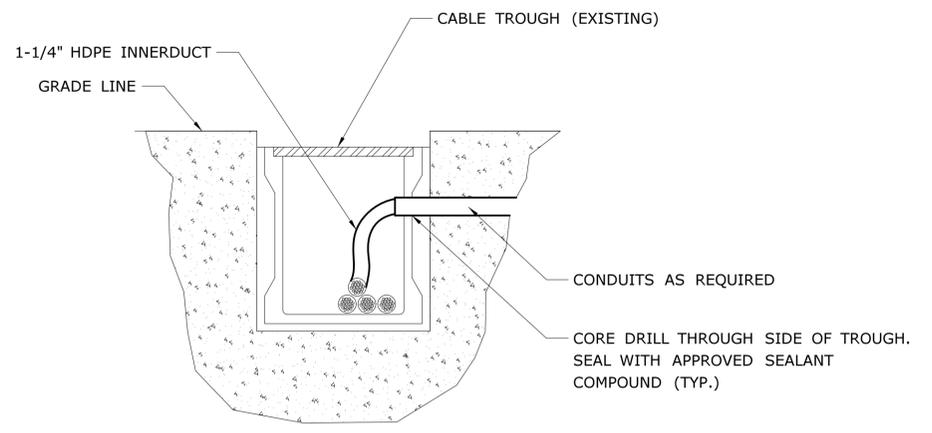
PROJECT TITLE:  
**NETWORK INFRASTRUCTURE  
UPGRADE FOR SECURITY  
NEW HAVEN LINE  
PHASE 2**

TOWN: **WESTPORT  
TO STRATFORD**  
DRAWING TITLE:  
**CONCRETE  
COMMUNICATIONS VAULT**

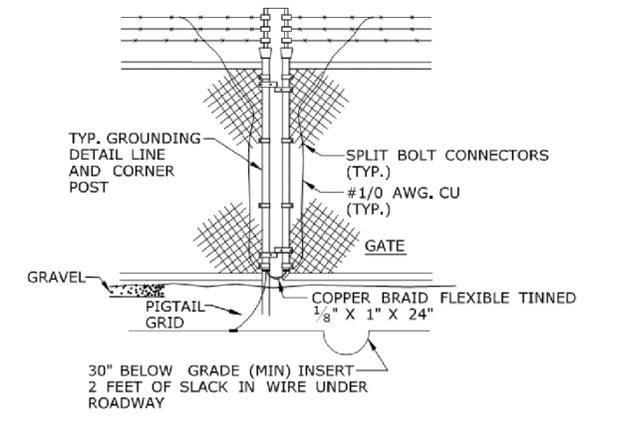
PROJECT NO. **300-0178**  
DRAWING NO. **FCI-652**  
SHEET NO. **06.030**



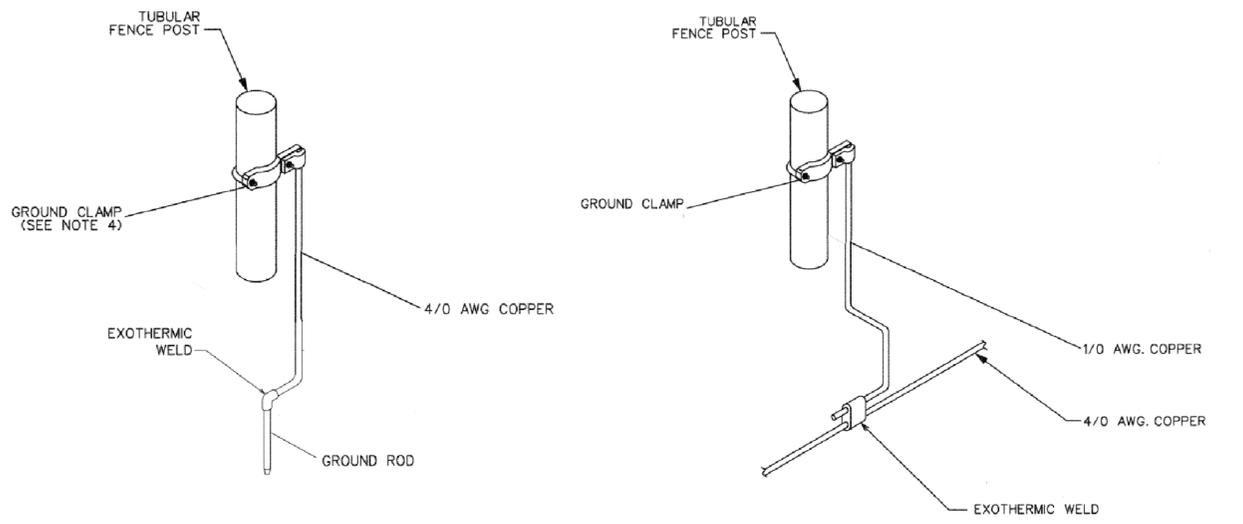
**1 WOOD POLE RISER DETAIL**  
FCI-653 NOT TO SCALE



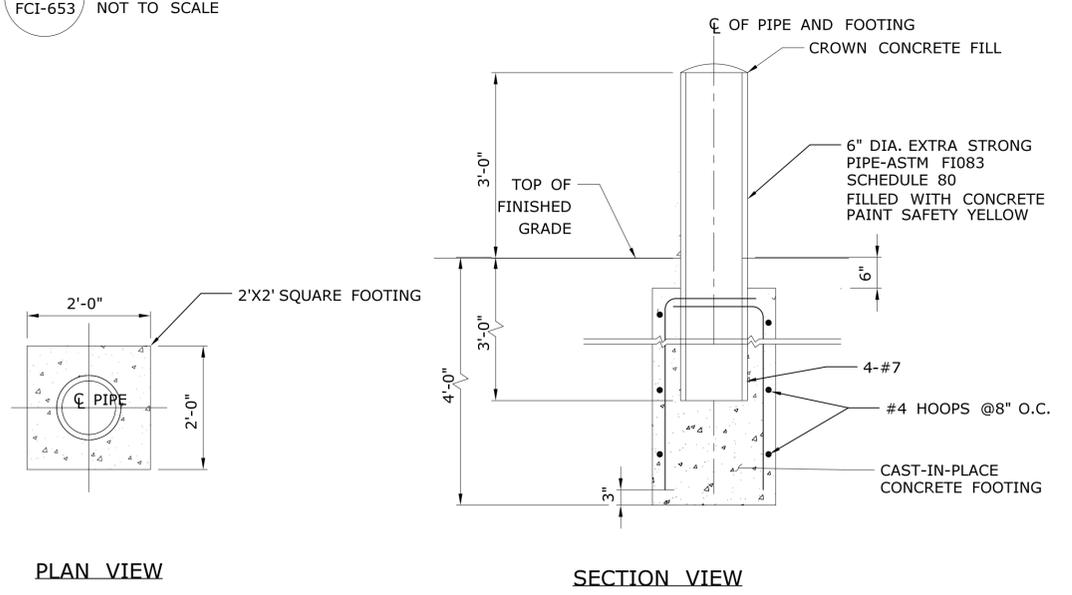
**2 CONDUIT-TROUGH PENETRATION**  
FCI-653 NOT TO SCALE



**4 CHAIN LINK FENCE GROUNDING AT GATE**  
FCI-653 NOT TO SCALE



**5 CHAIN LINK FENCE GROUNDING**  
FCI-653 NOT TO SCALE



**3 PIPE BOLLARD DETAIL**  
FCI-653 NOT TO SCALE

NOTES:  
1. DETAILS ARE TYPICAL. COORDINATE FINAL DETAILS WITH SITE CONDITIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.			DESIGNER/DRAFTER: <b>EN/GH</b> CHECKED BY: <b>CH</b> SCALE AS NOTED	<b>STATE OF CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION Filename: ...FCI-653_FA_Sheet_0300-0178.dgn	SIGNATURE/BLOCK:  STV Incorporated 185 Plains Road Suite 208E Milford, CT 06461	PROJECT TITLE: <b>NETWORK INFRASTRUCTURE UPGRADE FOR SECURITY NEW HAVEN LINE PHASE 2</b>	TOWN: <b>WESTPORT TO STRATFORD</b> DRAWING TITLE: <b>MISC. SITE DETAILS</b>	PROJECT NO. <b>300-0178</b> DRAWING NO. <b>FCI-653</b> SHEET NO. <b>06.031</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/2/2016				