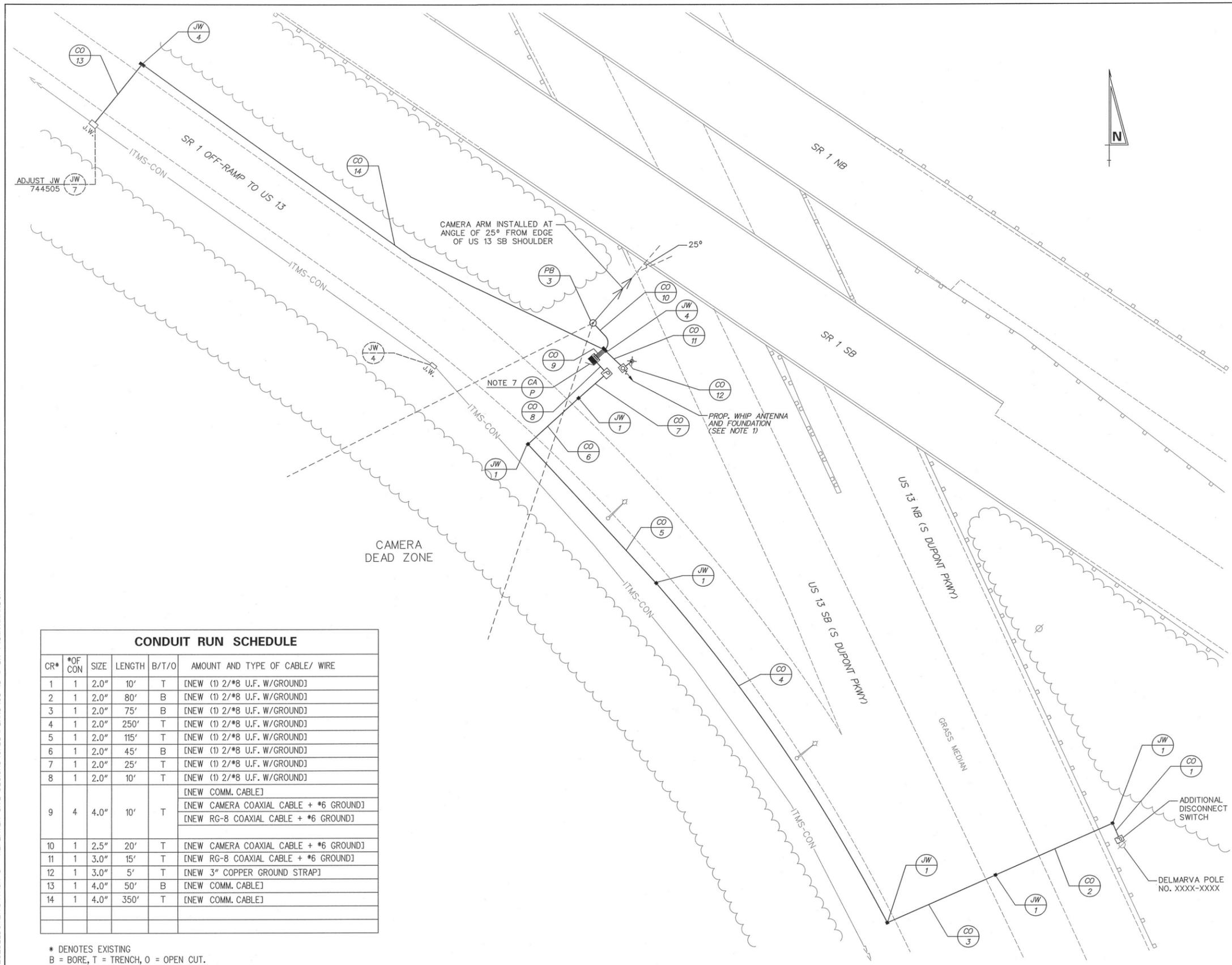


6/28/2012 9:18:20 AM \\RRK\my2010\2010\10028_DELDOT_ITS\TASK_5 - REPEATER SITE DESIGNS\CADD\PLANS\US 13 @ SR 1 (SMYRNA).DGN



ITMS LEGEND	
	- EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
	- EXISTING MULTICONDUCTOR CONDUIT (INSTALLED IN BARRIER)
	- EXISTING PULL BOX INSTALLED IN BARRIER
	- EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
	- EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
	- EXISTING CABINET BASE IDENTIFIER (TYPE OF CABINET BASE)
	- PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
	- PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
	- PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
	- PROPOSED CABINET BASE IDENTIFIER (TYPE OF CABINET BASE)
	- PROPOSED CCTV CAMERA POLE WITH DIRECTION OF ARM
	- PROPOSED TAR REPEATER WITH DIRECTION FOR LOWERING POLE
	- PROPOSED METERED SERVICE PEDESTAL WITH DISCONNECT
	- PROPOSED WAVETRONIX DEVICE
	- PROPOSED DYNAMIC MESSAGE BOARD

GENERAL REPEATER AND CCTV CAMERA NOTES

- CONTRACTOR SHALL INSTALL NEW 44' DELDOT SUPPLIED TAR WHIP ANTENNA ON A MODIFIED TYPE III POLE BASE USING DELDOT SUPPLIED ANCHOR BOLTS (SEE TAR REPEATER CONSTRUCTION DETAILS).
- CONTRACTOR SHALL AUGER A 10 IN. DIAMETER X 40.5 FT DEEP SHAFT FOR GROUND ROD INSTALLATION. GROUND ROD SHALL NOT BE MORE THAN 5' FROM EDGE OF REPEATER FOUNDATION.
- DELDOT SHALL INSTALL TAR TRANSMISSION EQUIPMENT AND PERFORM FINAL TUNING.
- CONDUIT 13 SHALL BE SDR-13.5 HDPE. ALL OTHER CONDUIT SHALL BE RIGID POLYVINYL CHLORIDE SCHEDULE 80.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.
- ALL SIGNAL EQUIPMENT REMOVED FROM THIS PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
- INSTALL CCTV EQUIPMENT AND REPEATER EQUIPMENT IN NEW TYPE P CABINET. DELDOT TRAFFIC FORCES TO ADJUST EQUIPMENT AS NEEDED.
- DELDOT FORCES SHALL INTEGRATE CCTV CAMERA WITH EXISTING FIBER TRUNKLINE.

CONDUIT RUN SCHEDULE					
CR*	#OF CON	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/ WIRE
1	1	2.0"	10'	T	[NEW (1) 2/*8 U.F. W/GROUND]
2	1	2.0"	80'	B	[NEW (1) 2/*8 U.F. W/GROUND]
3	1	2.0"	75'	B	[NEW (1) 2/*8 U.F. W/GROUND]
4	1	2.0"	250'	T	[NEW (1) 2/*8 U.F. W/GROUND]
5	1	2.0"	115'	T	[NEW (1) 2/*8 U.F. W/GROUND]
6	1	2.0"	45'	B	[NEW (1) 2/*8 U.F. W/GROUND]
7	1	2.0"	25'	T	[NEW (1) 2/*8 U.F. W/GROUND]
8	1	2.0"	10'	T	[NEW (1) 2/*8 U.F. W/GROUND]
9	4	4.0"	10'	T	[NEW COMM. CABLE] [NEW CAMERA COAXIAL CABLE + #6 GROUND] [NEW RG-8 COAXIAL CABLE + #6 GROUND]
10	1	2.5"	20'	T	[NEW CAMERA COAXIAL CABLE + #6 GROUND]
11	1	3.0"	15'	T	[NEW RG-8 COAXIAL CABLE + #6 GROUND]
12	1	3.0"	5'	T	[NEW 3" COPPER GROUND STRAP]
13	1	4.0"	50'	B	[NEW COMM. CABLE]
14	1	4.0"	350'	T	[NEW COMM. CABLE]

* DENOTES EXISTING
B = BORE, T = TRENCH, O = OPEN CUT.

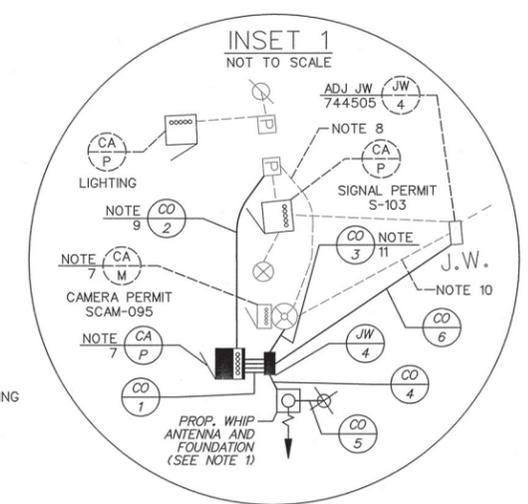
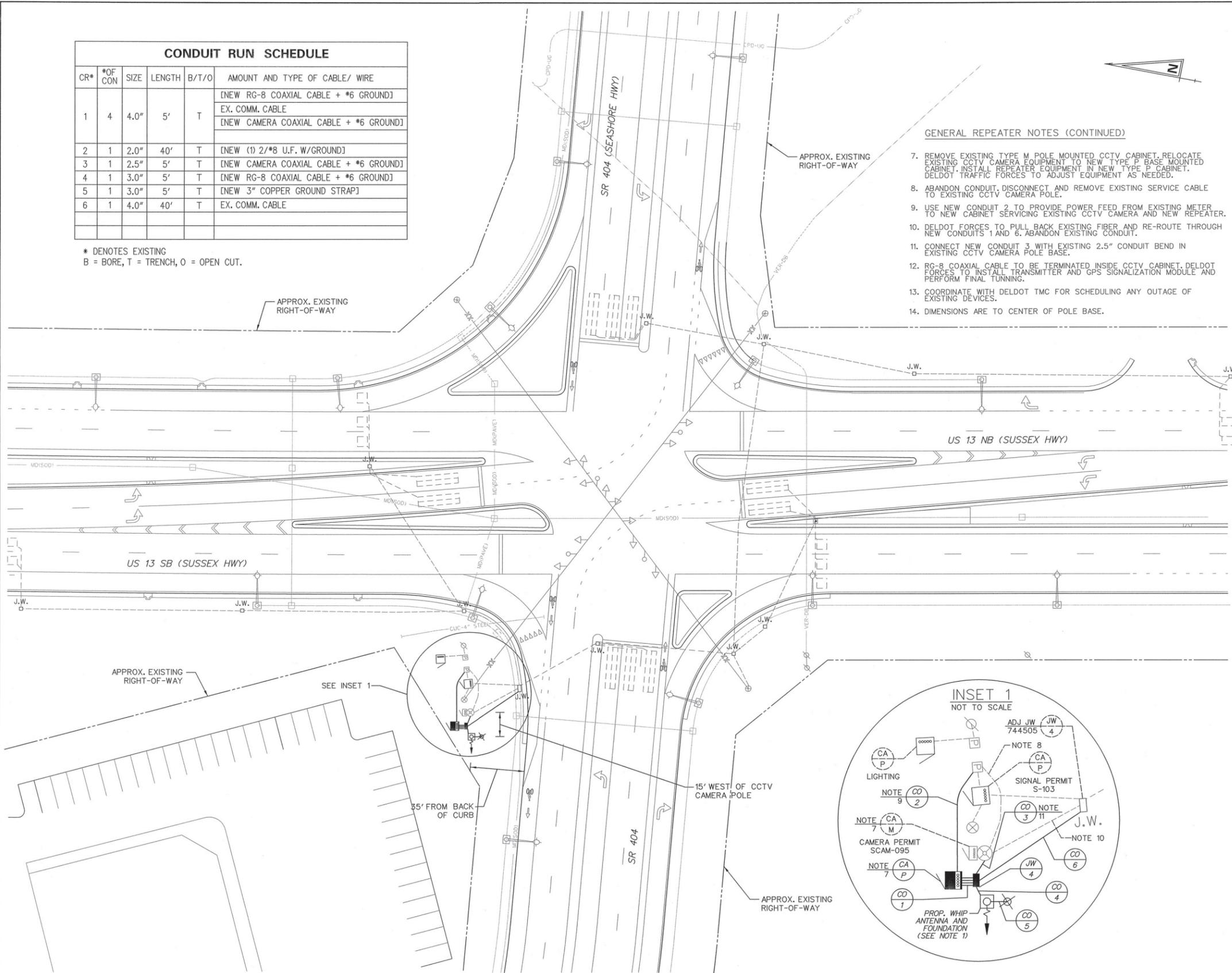
RECOMMENDED	DATE: 6/28/12	RECOMMENDED	DATE: 7/1/12	RECOMMENDED	DATE: 7/1/12	APPROVED TRAFFIC ENGINEER	DATE: 7/1/12	APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER	DATE: 7/1/12
DELAWARE DEPARTMENT OF TRANSPORTATION		SCALE FEET		CONTRACT T201304701 COUNTY NEW CASTLE		PERMIT NO. NWTMC07 DESIGNED BY: SM CHECKED BY: JCR		WTMC REPEATER AND CCTV PLAN SR 1 @ US 13	
				SHEET NO. 1 TOTAL SHTS. 1					

CONDUIT RUN SCHEDULE					
CR#	# OF CON	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/ WIRE
1	4	4.0"	5'	T	[NEW RG-8 COAXIAL CABLE + #6 GROUND] EX. COMM. CABLE [NEW CAMERA COAXIAL CABLE + #6 GROUND]
2	1	2.0"	40'	T	[NEW (1) 2/*8 U.F. W/GROUND]
3	1	2.5"	5'	T	[NEW CAMERA COAXIAL CABLE + #6 GROUND]
4	1	3.0"	5'	T	[NEW RG-8 COAXIAL CABLE + #6 GROUND]
5	1	3.0"	5'	T	[NEW 3" COPPER GROUND STRAP]
6	1	4.0"	40'	T	EX. COMM. CABLE

* DENOTES EXISTING
B = BORE, T = TRENCH, O = OPEN CUT.

GENERAL REPEATER NOTES (CONTINUED)

- REMOVE EXISTING TYPE M POLE MOUNTED CCTV CABINET, RELOCATE EXISTING CCTV CAMERA EQUIPMENT TO NEW TYPE P BASE MOUNTED CABINET. INSTALL REPEATER EQUIPMENT IN NEW TYPE P CABINET. DELDOT TRAFFIC FORCES TO ADJUST EQUIPMENT AS NEEDED.
- ABANDON CONDUIT, DISCONNECT AND REMOVE EXISTING SERVICE CABLE TO EXISTING CCTV CAMERA POLE.
- USE NEW CONDUIT 2 TO PROVIDE POWER FEED FROM EXISTING METER TO NEW CABINET SERVICING EXISTING CCTV CAMERA AND NEW REPEATER.
- DELDOT FORCES TO PULL BACK EXISTING FIBER AND RE-ROUTE THROUGH NEW CONDUITS 1 AND 6. ABANDON EXISTING CONDUIT.
- CONNECT NEW CONDUIT 3 WITH EXISTING 2.5" CONDUIT BEND IN EXISTING CCTV CAMERA POLE BASE.
- RG-8 COAXIAL CABLE TO BE TERMINATED INSIDE CCTV CABINET. DELDOT FORCES TO INSTALL TRANSMITTER AND GPS SIGNALIZATION MODULE AND PERFORM FINAL TUNNING.
- COORDINATE WITH DELDOT TMC FOR SCHEDULING ANY OUTAGE OF EXISTING DEVICES.
- DIMENSIONS ARE TO CENTER OF POLE BASE.



SIGNAL PHASING

SIGNAL HEAD DIAGRAM

LEGEND

	PROPOSED SIGNAL CABINET		REMOVE BY CONTRACTOR
	EXISTING SIGNAL CABINET		REMOVE BY OTHERS
	PROPOSED SIGNAL POLE BASE		ABANDON
	EXISTING SIGNAL POLE BASE		PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
	PROPOSED PEDESTRIAN POLE BASE		EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
	EXISTING PEDESTRIAN POLE BASE		PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
	PROPOSED WOOD POLE		EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
	EXISTING UTILITY POLE		PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
	PROPOSED JUNCTION WELL		EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
	EXISTING JUNCTION WELL		PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
	PROPOSED SIGNAL HEAD		EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
	EXISTING SIGNAL HEAD		EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
	PROPOSED PEDESTRIAN SIGNAL HEAD		PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)
	EXISTING PEDESTRIAN SIGNAL HEAD		EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)
	PROPOSED PEDESTRIAN PUSHBUTTON		PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)
	EXISTING PEDESTRIAN PUSHBUTTON		EXISTING CABINET IDENTIFIER (TYPE OF CABINET)
	PROPOSED VIDEO DETECTION		PROPOSED SPAN WIRE
	EXISTING VIDEO DETECTION		EXISTING SPAN WIRE
	PROPOSED MICROWAVE DETECTION		RIGHT-OF-WAY OR PROPERTY LINE
	EXISTING MICROWAVE DETECTION		SERVICE PEDESTAL
	PROPOSED OVERHEAD SIGNING		PROPOSED GROUND ROD
	PROPOSED OPTICOM RECEIVER		PROPOSED TAR REPEATER
	EXISTING OPTICOM RECEIVER		DIRECTION FOR LOWERING POLE
	PROPOSED MAST ARM		
	EXISTING MAST ARM		
	PROPOSED LUMINAIRE		
	EXISTING LUMINAIRE		
	PROPOSED LOOP DETECTOR (TYPE 1 OR 2)		
	EXISTING LOOP DETECTOR (TYPE 1 OR 2)		

GENERAL REPEATER NOTES

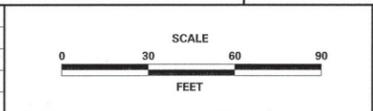
- CONTRACTOR SHALL INSTALL NEW 44" DELDOT SUPPLIED TAR WHIP ANTENNA ON A MODIFIED TYPE III POLE BASE USING DELDOT SUPPLIED ANCHOR BOLTS (SEE TAR REPEATER CONSTRUCTION DETAILS).
- CONTRACTOR SHALL AUGER A 10 IN DIAMETER X 40.5 FT DEEP SHAFT FOR GROUND ROD INSTALLATION. GROUND ROD SHALL NOT BE MORE THAN 5' FROM EDGE OF REPEATER FOUNDATION.
- DELDOT SHALL INSTALL TAR TRANSMISSION EQUIPMENT AND PERFORM FINAL TUNING.
- ALL GALVANIZED CONDUIT (GRC) SHALL BE BEAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS, SET SCREWS, BOLTS, AND COMPRESSION FITTINGS ARE NOT ACCEPTABLE.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.
- ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

6/28/2012 9:17:11 AM \\RRK\K\2010\2010\10028_DELDOT_ITS\TASK 5 - REPEATER SITE DESIGN\CADD\PLANS\5103 - US 13 @ SR 404.DGN

RECOMMENDED DATE: 6.28.12 RECOMMENDED DATE: RECOMMENDED DATE: 7/1/12 APPROVED TRAFFIC ENGINEER DATE: 7/1/12 APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER DATE: 7/1/12

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS



CONTRACT	T201304701
COUNTY	SUSSEX

PERMIT NO.	SWTMC08
DESIGNED BY:	SM
CHECKED BY:	JCR

WTMC REPEATER PLAN
US 13 (SUSSEX HWY) @
SR 404 (SEASHORE HWY)

SHEET NO.	1
TOTAL SHTS.	1