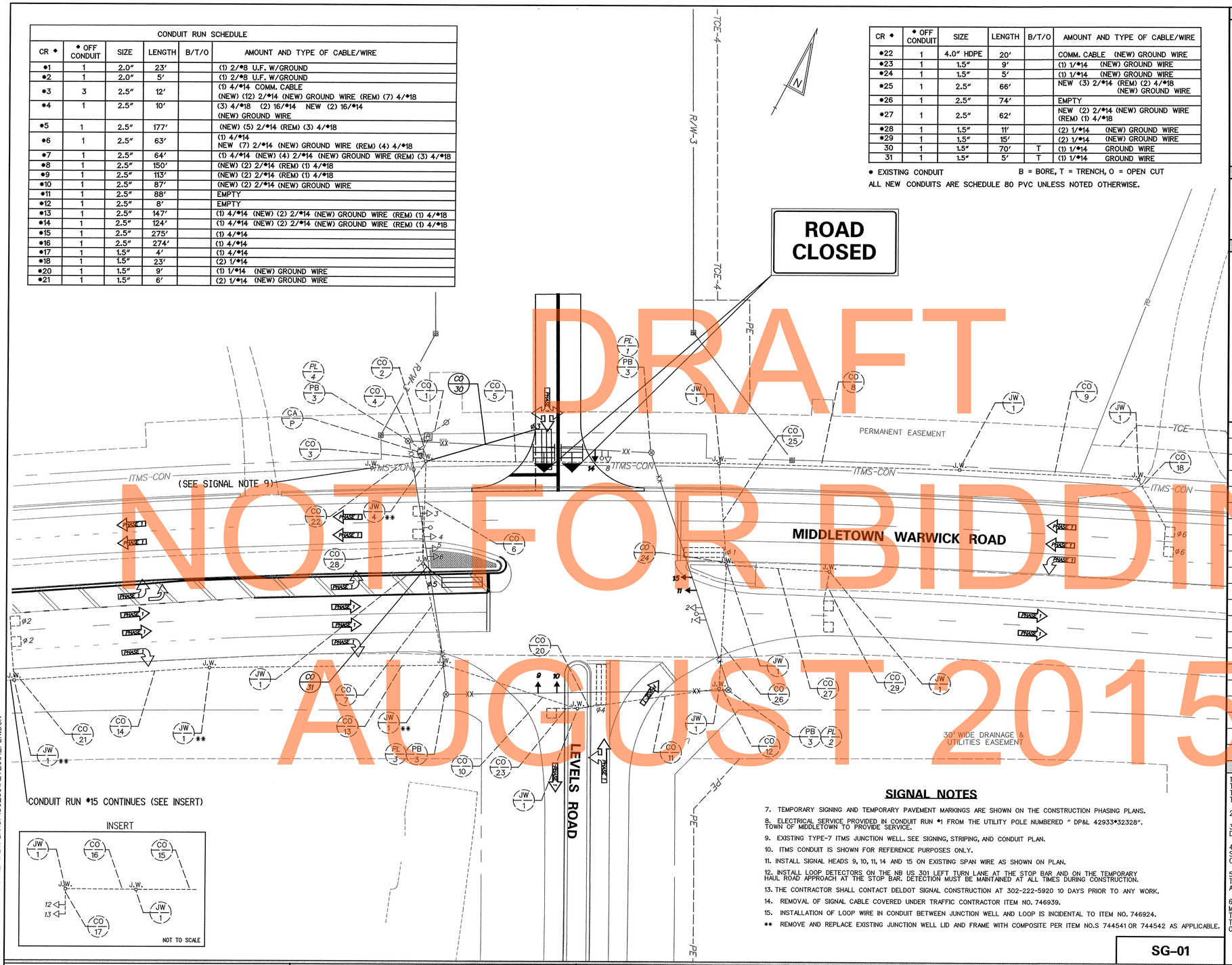
CONDUIT RUN SCHEDULE					
CR #	# OFF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/WIRE
#1	1	2.0"	23'		(1) 2/#8 U.F. W/GROUND
#2	1	2.0"	5'		(1) 2/#8 U.F. W/GROUND
#3	3	2.5"	12'		(1) 4/#14 COMM. CABLE (NEW) (12) 2/#14 (NEW) GROUND WIRE (REM) (7) 4/#18
#4	1	2.5"	10'		(3) 4/#18 (2) 16/#14 NEW (2) 16/#14 (NEW) GROUND WIRE
#5	1	2.5"	177'		(NEW) (5) 2/#14 (REM) (3) 4/#18
#6	1	2.5"	63'		(1) 4/#14 NEW (7) 2/#14 (NEW) GROUND WIRE (REM) (4) 4/#18
#7	1	2.5"	64'		(1) 4/#14 (NEW) (4) 2/#14 (NEW) GROUND WIRE (REM) (3) 4/#18
#8	1	2.5"	150'		(NEW) (2) 2/#14 (REM) (1) 4/#18
#9	1	2.5"	113'		(NEW) (2) 2/#14 (REM) (1) 4/#18
#10	1	2.5"	87'		(NEW) (2) 2/#14 (NEW) GROUND WIRE
#11	1	2.5"	88'		EMPTY
#12	1	2.5"	8'		EMPTY
#13	1	2.5"	147'		(1) 4/#14 (NEW) (2) 2/#14 (NEW) GROUND WIRE (REM) (1) 4/#18
#14	1	2.5"	124'		(1) 4/#14 (NEW) (2) 2/#14 (NEW) GROUND WIRE (REM) (1) 4/#18
#15	1	2.5"	275'		(1) 4/#14
#16	1	2.5"	274'		(1) 4/#14
#17	1	1.5"	4'		(1) 4/#14
#18	1	1.5"	23'		(2) 1/#14
#20	1	1.5"	9'		(1) 1/#14 (NEW) GROUND WIRE
#21	1	1.5"	6'		(2) 1/#14 (NEW) GROUND WIRE

CR #	# OFF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/WIRE
#22	1	4.0" HDPE	20'		COMM. CABLE (NEW) GROUND WIRE
#23	1	1.5"	9'		(1) 1/#14 (NEW) GROUND WIRE
#24	1	1.5"	5'		(1) 1/#14 (NEW) GROUND WIRE
#25	1	2.5"	66'		NEW (3) 2/#14 (REM) (2) 4/#18 (NEW) GROUND WIRE
#26	1	2.5"	74'		EMPTY
#27	1	2.5"	62'		NEW (2) 2/#14 (NEW) GROUND WIRE (REM) (1) 4/#18
#28	1	1.5"	11'		(2) 1/#14 (NEW) GROUND WIRE
#29	1	1.5"	15'		(2) 1/#14 (NEW) GROUND WIRE
30	1	1.5"	70'	T	(1) 1/#14 GROUND WIRE
31	1	1.5"	5'	T	(1) 1/#14 GROUND WIRE

EXISTING CONDUIT

B = BORE, T = TRENCH, O = OPEN CUT

ALL NEW CONDUITS ARE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.

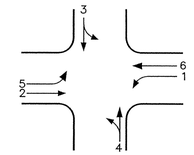


SIGNAL NOTES

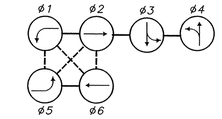
7. TEMPORARY SIGNING AND TEMPORARY PAVEMENT MARKINGS ARE SHOWN ON THE CONSTRUCTION PHASING PLANS.
8. ELECTRICAL SERVICE PROVIDED IN CONDUIT RUN #1 FROM THE UTILITY POLE NUMBERED " DP&L 42933*32328".
9. EXISTING TYPE-7 ITMS JUNCTION WELL. SEE SIGNING, STRIPING, AND CONDUIT PLAN.
10. ITMS CONDUIT IS SHOWN FOR REFERENCE PURPOSES ONLY.
11. INSTALL SIGNAL HEADS 9, 10, 11, 14 AND 15 ON EXISTING SPAN WIRE AS SHOWN ON PLAN.
12. INSTALL LOOP DETECTORS ON THE NB US 301 LEFT TURN LANE AT THE STOP BAR AND ON THE TEMPORARY HAUL ROAD APPROACH AT THE STOP BAR. DETECTION MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
13. THE CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.
14. REMOVAL OF SIGNAL CABLE COVERED UNDER TRAFFIC CONTRACTOR ITEM NO. 746939.
15. INSTALLATION OF LOOP WIRE IN CONDUIT BETWEEN JUNCTION WELL AND LOOP IS INCIDENTAL TO ITEM NO. 746924.

** REMOVE AND REPLACE EXISTING JUNCTION WELL LID AND FRAME WITH COMPOSITE PER ITEM NO.S 744541 OR 744542 AS APPLICABLE.

SIGNAL PHASING



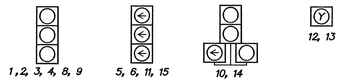
NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE #1 - 6' x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
TYPE #2 - 6' x 25' - TO BE INSTALLED ON MAIN STREET LEFT TURN MOVEMENTS.
TYPE #2 - 6' x 25' - TO BE INSTALLED ON SIDE STREET THROUGH AND LEFT TURN MOVEMENTS.
2. ALL SIGNAL POLES WILL BE 32 FEET, EXCEPT WHERE SHOWN.
3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
5. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
6. 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.

SG-01

RECOMMENDED Tony K. Farrell DATE: 12/18/2014

RECOMMENDED DATE: 5.18.15

RECOMMENDED DATE:

APPROVED TRAFFIC ENGINEER DATE: 5/12/15

APPROVED FOR INSTALLATION
CHIEF TRAFFIC ENGINEER DATE: 5/19/15

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

US 301
MARYLAND STATE LINE
TO LEVELS ROAD

CONTRACT	PERMIT NO.	N726
T200811301	DESIGNED BY: TLM	
COUNTY	CHECKED BY: PAH	
NEW CASTLE		

TEMPORARY SIGNAL PLAN
MIDDLETOWN WARWICK RD
/LEVELS RD PHASE 1

SHEET NO.	793
TOTAL SHTS.	850

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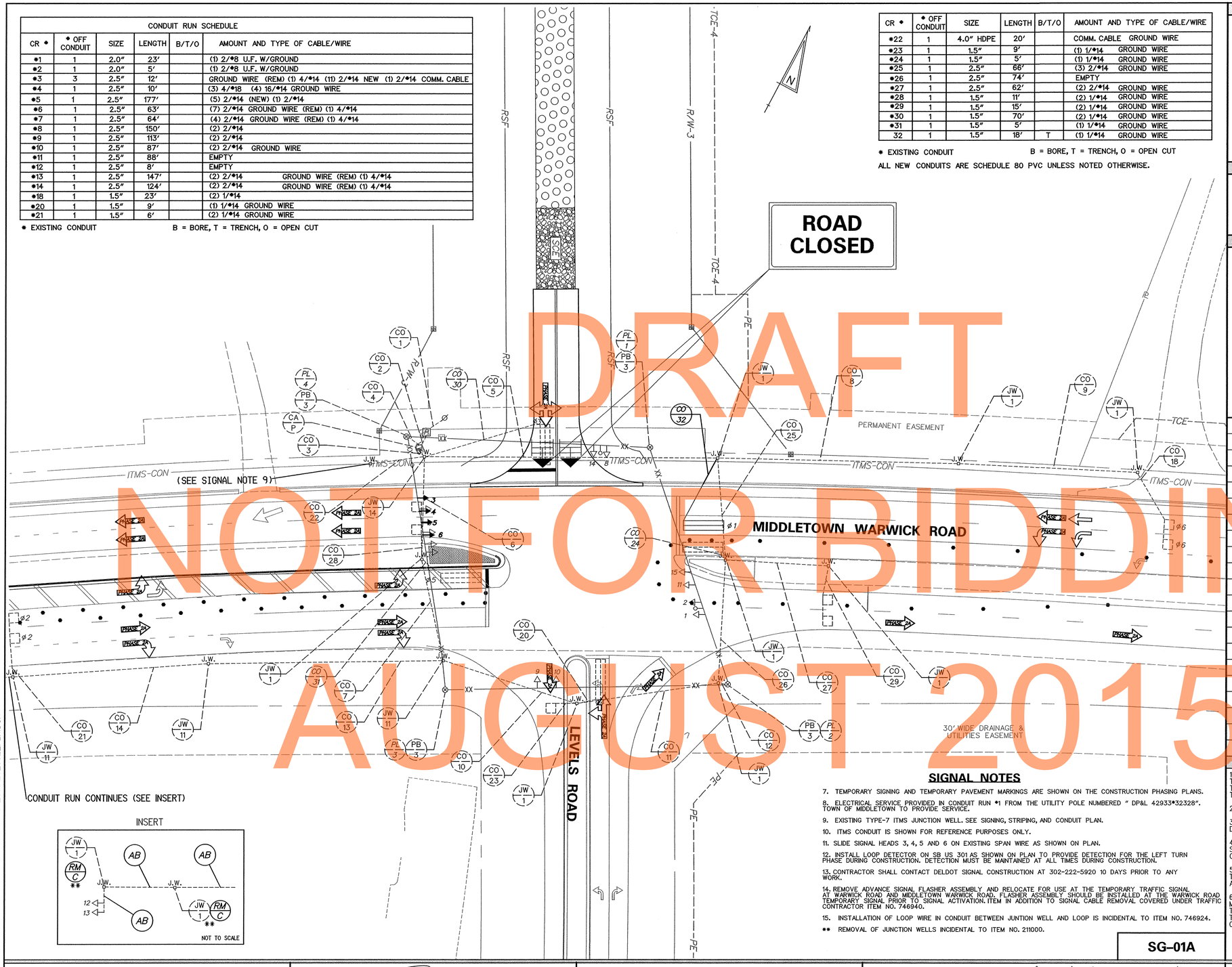
CONDUIT RUN SCHEDULE					
CR *	* OFF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/WIRE
*1	1	2.0"	23'		(1) 2/#8 U.F. W/GROUND
*2	1	2.0"	5'		(1) 2/#8 U.F. W/GROUND
*3	3	2.5"	12'		GROUND WIRE (REM) (1) 4/#14 (11) 2/#14 NEW (1) 2/#14 COMM. CABLE
*4	1	2.5"	10'		(3) 4/#18 (4) 16/#14 GROUND WIRE
*5	1	2.5"	177'		(5) 2/#14 (NEW) (1) 2/#14
*6	1	2.5"	63'		(7) 2/#14 GROUND WIRE (REM) (1) 4/#14
*7	1	2.5"	64'		(4) 2/#14 GROUND WIRE (REM) (1) 4/#14
*8	1	2.5"	150'		(2) 2/#14
*9	1	2.5"	113'		(2) 2/#14
*10	1	2.5"	87'		(2) 2/#14 GROUND WIRE
*11	1	2.5"	88'		EMPTY
*12	1	2.5"	8'		EMPTY
*13	1	2.5"	147'		(2) 2/#14 GROUND WIRE (REM) (1) 4/#14
*14	1	2.5"	124'		(2) 2/#14 GROUND WIRE (REM) (1) 4/#14
*18	1	1.5"	23'		(2) 1/#14
*20	1	1.5"	9'		(1) 1/#14 GROUND WIRE
*21	1	1.5"	6'		(2) 1/#14 GROUND WIRE

* EXISTING CONDUIT B = BORE, T = TRENCH, O = OPEN CUT

CR *	* OFF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/WIRE
*22	1	4.0" HDPE	20'		COMM. CABLE GROUND WIRE
*23	1	1.5"	9'		(1) 1/#14 GROUND WIRE
*24	1	1.5"	5'		(1) 1/#14 GROUND WIRE
*25	1	2.5"	66'		(3) 2/#14 GROUND WIRE
*26	1	2.5"	74'		EMPTY
*27	1	2.5"	62'		(2) 2/#14 GROUND WIRE
*28	1	1.5"	11'		(2) 1/#14 GROUND WIRE
*29	1	1.5"	15'		(2) 1/#14 GROUND WIRE
*30	1	1.5"	70'		(2) 1/#14 GROUND WIRE
*31	1	1.5"	5'		(1) 1/#14 GROUND WIRE
32	1	1.5"	18'	T	(1) 1/#14 GROUND WIRE

* EXISTING CONDUIT B = BORE, T = TRENCH, O = OPEN CUT

ALL NEW CONDUITS ARE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.



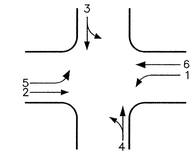
SIGNAL NOTES

7. TEMPORARY SIGNING AND TEMPORARY PAVEMENT MARKINGS ARE SHOWN ON THE CONSTRUCTION PHASING PLANS.
8. ELECTRICAL SERVICE PROVIDED IN CONDUIT RUN *1 FROM THE UTILITY POLE NUMBERED " DP&L 42933*32328". TOWN OF MIDDLETOWN TO PROVIDE SERVICE.
9. EXISTING TYPE-7 ITMS JUNCTION WELL. SEE SIGNING, STRIPING, AND CONDUIT PLAN.
10. ITMS CONDUIT IS SHOWN FOR REFERENCE PURPOSES ONLY.
11. SLIDE SIGNAL HEADS 3, 4, 5 AND 6 ON EXISTING SPAN WIRE AS SHOWN ON PLAN.
12. INSTALL LOOP DETECTOR ON SB US 301 AS SHOWN ON PLAN TO PROVIDE DETECTION FOR THE LEFT TURN PHASE DURING CONSTRUCTION. DETECTION MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
13. CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.
14. REMOVE ADVANCE SIGNAL FLASHER ASSEMBLY AND RELOCATE FOR USE AT THE TEMPORARY TRAFFIC SIGNAL AT WARWICK ROAD AND MIDDLETOWN WARWICK ROAD. FLASHER ASSEMBLY SHOULD BE INSTALLED AT THE WARWICK ROAD TEMPORARY SIGNAL PRIOR TO SIGNAL ACTIVATION. ITEM IN ADDITION TO SIGNAL CABLE REMOVAL COVERED UNDER TRAFFIC CONTRACTOR ITEM NO. 746940.
15. INSTALLATION OF LOOP WIRE IN CONDUIT BETWEEN JUNTION WELL AND LOOP IS INCIDENTAL TO ITEM NO. 746924.

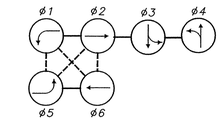
** REMOVAL OF JUNCTION WELLS INCIDENTAL TO ITEM NO. 211000.

SG-01A

SIGNAL PHASING



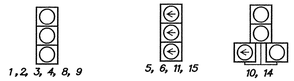
NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH *	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH *	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO *	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO *	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (* OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (* OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE *1 - 6' x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
TYPE *2 - 6' x 25' - TO BE INSTALLED ON MAIN STREET LEFT TURN MOVEMENTS.
TYPE *2 - 6' x 25' - TO BE INSTALLED ON SIDE STREET THROUGH AND LEFT TURN MOVEMENTS.
2. ALL SIGNAL POLES WILL BE 32 FEET, EXCEPT WHERE SHOWN.
3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
5. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
6. 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.

RECOMMENDED Tony K. Fennell DATE: 12/18/2014

RECOMMENDED _____ DATE: 5.18.15

RECOMMENDED _____ DATE: _____

APPROVED TRAFFIC ENGINEER _____ DATE: 5/18/15

APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 5/19/15

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

US 301 MARYLAND STATE LINE TO LEVELS ROAD

CONTRACT	T200811301
COUNTY	NEW CASTLE
PERMIT NO.	N726
DESIGNED BY: TLM	
CHECKED BY: PAH	

TEMPORARY SIGNAL PLAN MIDDLETOWN WARWICK RD /LEVELS RD PHASE 2A

SHEET NO.	794
TOTAL SHTS.	850

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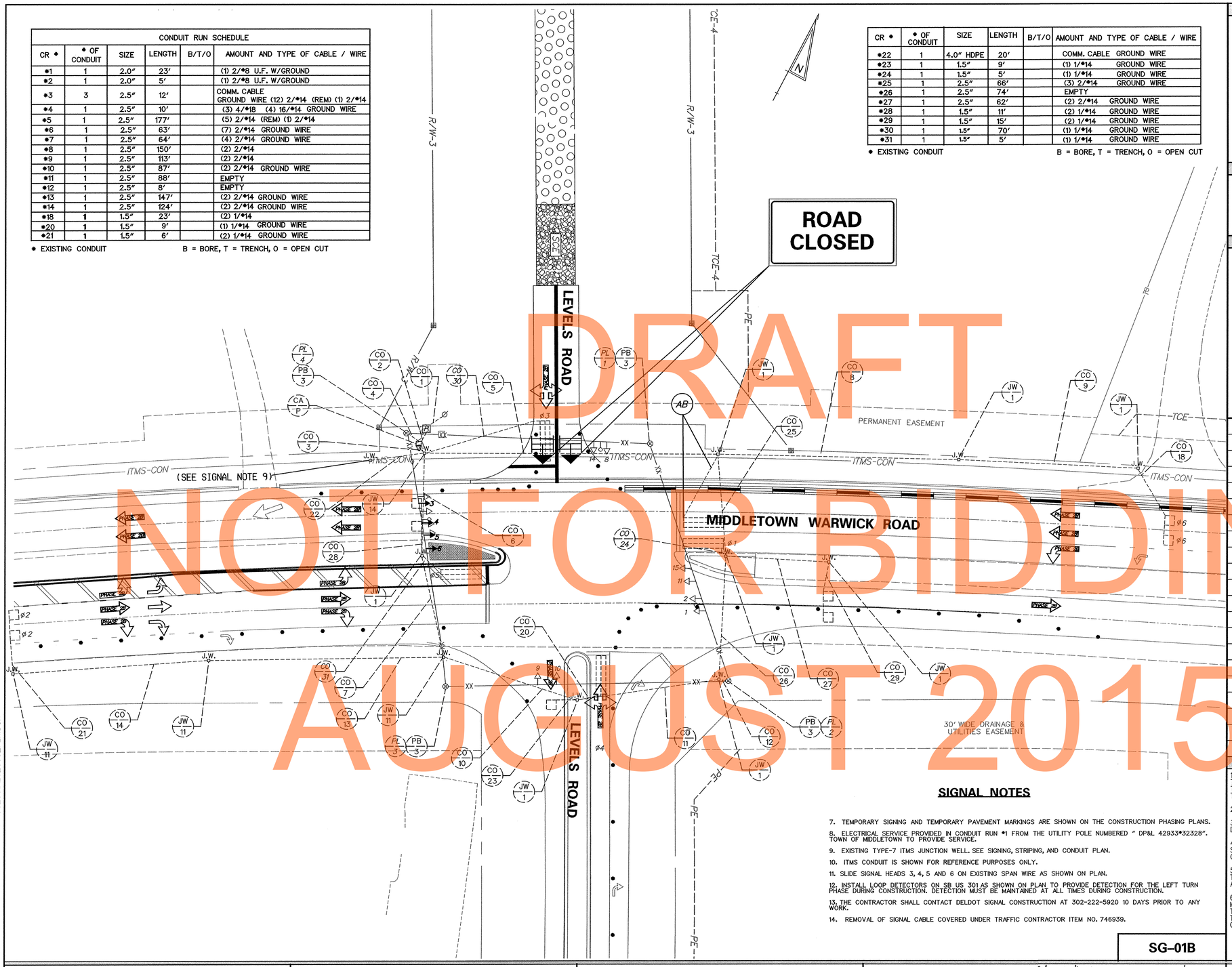
CONDUIT RUN SCHEDULE					
CR #	# OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
#1	1	2.0"	23'		(1) 2/#8 U.F. W/GROUND
#2	1	2.0"	5'		(1) 2/#8 U.F. W/GROUND
#3	3	2.5"	12'		COMM. CABLE GROUND WIRE (12) 2/#14 (REM) (1) 2/#14
#4	1	2.5"	10'		(3) 4/#18 (4) 16/#14 GROUND WIRE
#5	1	2.5"	177'		(5) 2/#14 (REM) (1) 2/#14
#6	1	2.5"	63'		(7) 2/#14 GROUND WIRE
#7	1	2.5"	64'		(4) 2/#14 GROUND WIRE
#8	1	2.5"	150'		(2) 2/#14
#9	1	2.5"	113'		(2) 2/#14
#10	1	2.5"	87'		(2) 2/#14 GROUND WIRE
#11	1	2.5"	88'		EMPTY
#12	1	2.5"	8'		EMPTY
#13	1	2.5"	147'		(2) 2/#14 GROUND WIRE
#14	1	2.5"	124'		(2) 2/#14 GROUND WIRE
#18	1	1.5"	23'		(2) 1/#14
#20	1	1.5"	9'		(1) 1/#14 GROUND WIRE
#21	1	1.5"	6'		(2) 1/#14 GROUND WIRE

EXISTING CONDUIT B = BORE, T = TRENCH, O = OPEN CUT

CR #	# OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
#22	1	4.0" HDPE	20'		COMM. CABLE GROUND WIRE
#23	1	1.5"	9'		(1) 1/#14 GROUND WIRE
#24	1	1.5"	5'		(1) 1/#14 GROUND WIRE
#25	1	2.5"	66'		(3) 2/#14 GROUND WIRE
#26	1	2.5"	74'		EMPTY
#27	1	2.5"	62'		(2) 2/#14 GROUND WIRE
#28	1	1.5"	11'		(2) 1/#14 GROUND WIRE
#29	1	1.5"	15'		(2) 1/#14 GROUND WIRE
#30	1	1.5"	70'		(1) 1/#14 GROUND WIRE
#31	1	1.5"	5'		(1) 1/#14 GROUND WIRE

EXISTING CONDUIT B = BORE, T = TRENCH, O = OPEN CUT

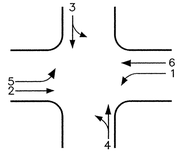


SIGNAL NOTES

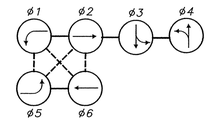
7. TEMPORARY SIGNING AND TEMPORARY PAVEMENT MARKINGS ARE SHOWN ON THE CONSTRUCTION PHASING PLANS.
8. ELECTRICAL SERVICE PROVIDED IN CONDUIT RUN #1 FROM THE UTILITY POLE NUMBERED " DP&L 42933*32328". TOWN OF MIDDLETOWN TO PROVIDE SERVICE.
9. EXISTING TYPE-7 ITMS JUNCTION WELL. SEE SIGNING, STRIPING, AND CONDUIT PLAN.
10. ITMS CONDUIT IS SHOWN FOR REFERENCE PURPOSES ONLY.
11. SLIDE SIGNAL HEADS 3, 4, 5 AND 6 ON EXISTING SPAN WIRE AS SHOWN ON PLAN.
12. INSTALL LOOP DETECTORS ON SB US 301 AS SHOWN ON PLAN TO PROVIDE DETECTION FOR THE LEFT TURN PHASE DURING CONSTRUCTION. DETECTION MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
13. THE CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.
14. REMOVAL OF SIGNAL CABLE COVERED UNDER TRAFFIC CONTRACTOR ITEM NO. 746939.

SG-01B

SIGNAL PHASING



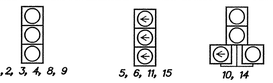
NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1	▭	▭
LOOP DETECTOR, TYPE 2	▭	▭
LUMINAIRE	—○—	—●—
MAST ARM	▷	▶
MICROWAVE DETECTION	—◂	—◂
OPTICOM RECEIVER	—○	—●
OVERHEAD SIGNING		—⊣
PEDESTRIAN POLE/BASE	○	◉
PEDESTRIAN PUSHBUTTON	—○	—→
PEDESTRIAN SIGNAL HEAD	—□	—■
RIGHT-OF-WAY	———	—R/W—
SERVICE PEDESTAL		P
SIGNAL CABINET		■
SIGNAL HEAD	—▷	—▶
SIGNAL POLE/BASE	⊗	⊙
SPAN INSULATOR	◇	◆
SPAN WIRE	—XX—	—◇—
UTILITY POLE	⊘	⊘
VIDEO DETECTION	◀	◀

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE #1 - 6'x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
TYPE #2 - 6'x 25' - TO BE INSTALLED ON MAIN STREET LEFT TURN MOVEMENTS.
TYPE #2 - 6'x 25' - TO BE INSTALLED ON SIDE STREET THROUGH AND LEFT TURN MOVEMENTS.
2. ALL SIGNAL POLES WILL BE 32 FEET, EXCEPT WHERE SHOWN.
3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
5. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
6. 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.

RECOMMENDED Tracy K. Fowler DATE: 12/18/2014

RECOMMENDED [signature] DATE: 5.18.15

RECOMMENDED _____ DATE: _____

APPROVED TRAFFIC ENGINEER [signature] DATE: 5/19/15

APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER [signature] DATE: 5/19/15

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

US 301 MARYLAND STATE LINE TO LEVELS ROAD

CONTRACT	T200811301
COUNTY	NEW CASTLE
PERMIT NO.	N726
DESIGNED BY: TLM	
CHECKED BY: PAH	

TEMPORARY SIGNAL PLAN MIDDLETOWN WARWICK RD /LEVELS RD PHASE 2B

SHEET NO.	795
TOTAL SHTS.	850

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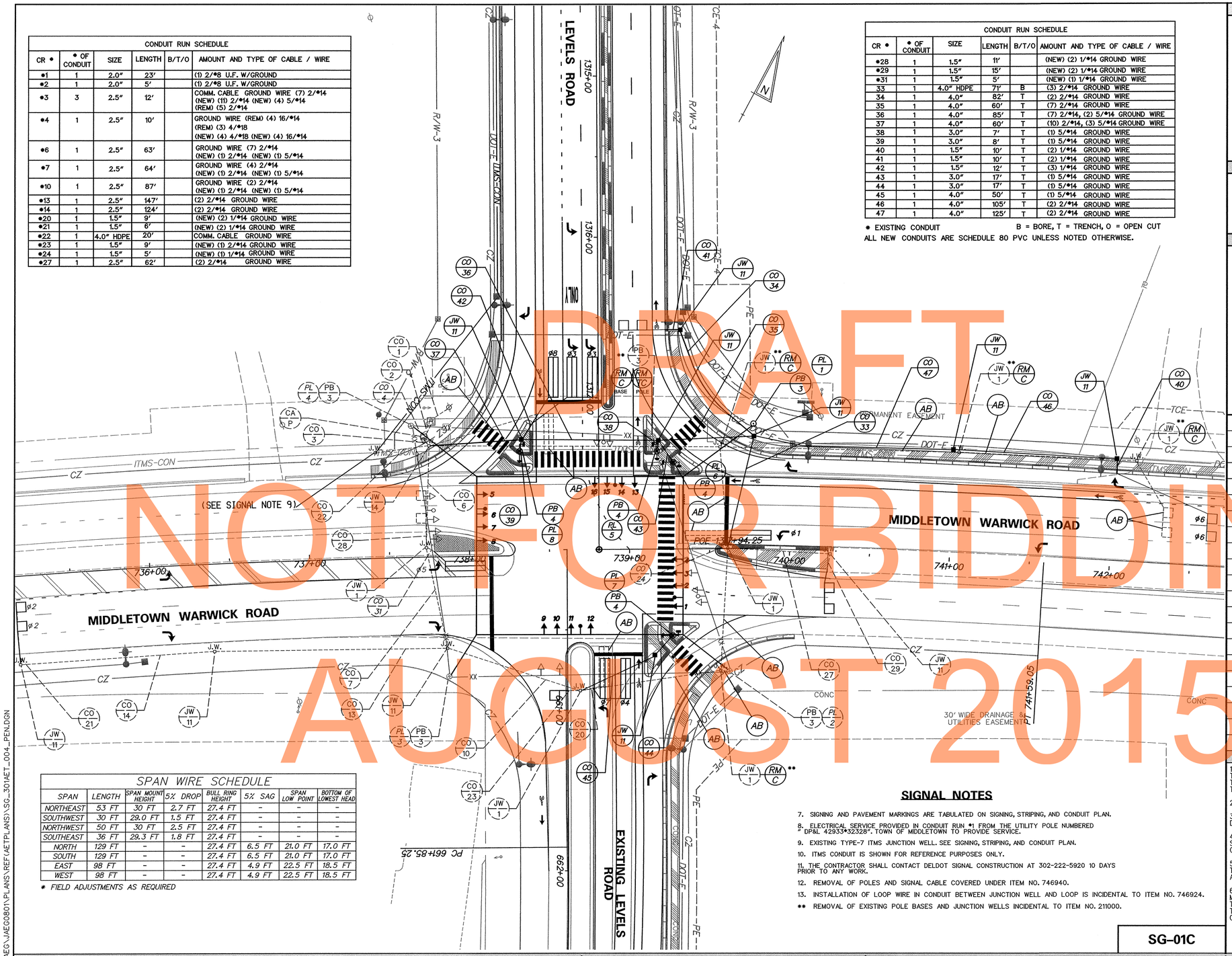
CONDUIT RUN SCHEDULE					
CR *	* OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	2.0"	23'		(1) 2/#8 U.F. W/GROUND
*2	1	2.0"	5'		(1) 2/#8 U.F. W/GROUND
*3	3	2.5"	12'		COMM. CABLE GROUND WIRE (7) 2/#14 (NEW) (1) 2/#14 (NEW) (4) 5/#14 (REM) (5) 2/#14
*4	1	2.5"	10'		GROUND WIRE (REM) (4) 16/#14 (REM) (3) 4/#18 (NEW) (4) 4/#18 (NEW) (4) 16/#14
*6	1	2.5"	63'		GROUND WIRE (7) 2/#14 (NEW) (1) 2/#14 (NEW) (1) 5/#14
*7	1	2.5"	64'		GROUND WIRE (4) 2/#14 (NEW) (1) 2/#14 (NEW) (1) 5/#14
*10	1	2.5"	87'		GROUND WIRE (2) 2/#14 (NEW) (1) 2/#14 (NEW) (1) 5/#14
*13	1	2.5"	147'		(2) 2/#14 GROUND WIRE
*14	1	2.5"	124'		(2) 2/#14 GROUND WIRE
*20	1	1.5"	9'		(NEW) (2) 1/#14 GROUND WIRE
*21	1	1.5"	6'		(NEW) (2) 1/#14 GROUND WIRE
*22	1	4.0" HDPE	20'		COMM. CABLE GROUND WIRE
*23	1	1.5"	9'		(NEW) (1) 2/#14 GROUND WIRE
*24	1	1.5"	5'		(NEW) (1) 1/#14 GROUND WIRE
*27	1	2.5"	62'		(2) 2/#14 GROUND WIRE

CONDUIT RUN SCHEDULE					
CR *	* OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*28	1	1.5"	11'		(NEW) (2) 1/#14 GROUND WIRE
*29	1	1.5"	15'		(NEW) (2) 1/#14 GROUND WIRE
*31	1	1.5"	5'		(NEW) (1) 1/#14 GROUND WIRE
33	1	4.0" HDPE	71'	B	(3) 2/#14 GROUND WIRE
34	1	4.0"	82'	T	(2) 2/#14 GROUND WIRE
35	1	4.0"	60'	T	(7) 2/#14 GROUND WIRE
36	1	4.0"	85'	T	(7) 2/#14, (2) 5/#14 GROUND WIRE
37	1	4.0"	60'	T	(10) 2/#14, (3) 5/#14 GROUND WIRE
38	1	3.0"	7'	T	(1) 5/#14 GROUND WIRE
39	1	3.0"	8'	T	(1) 5/#14 GROUND WIRE
40	1	1.5"	10'	T	(2) 1/#14 GROUND WIRE
41	1	1.5"	10'	T	(2) 1/#14 GROUND WIRE
42	1	1.5"	12'	T	(3) 1/#14 GROUND WIRE
43	1	3.0"	17'	T	(1) 5/#14 GROUND WIRE
44	1	3.0"	17'	T	(1) 5/#14 GROUND WIRE
45	1	4.0"	50'	T	(1) 5/#14 GROUND WIRE
46	1	4.0"	105'	T	(2) 2/#14 GROUND WIRE
47	1	4.0"	125'	T	(2) 2/#14 GROUND WIRE

* EXISTING CONDUIT B = BORE, T = TRENCH, O = OPEN CUT

ALL NEW CONDUITS ARE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.



SPAN WIRE SCHEDULE

SPAN	LENGTH	SPAN MOUNT HEIGHT	5% DROP	BULL RING HEIGHT	5% SAG	SPAN LOW POINT	BOTTOM OF LOWEST HEAD
NORTHEAST	53 FT	30 FT	2.7 FT	27.4 FT	-	-	-
SOUTHWEST	30 FT	29.0 FT	1.5 FT	27.4 FT	-	-	-
NORTHWEST	50 FT	30 FT	2.5 FT	27.4 FT	-	-	-
SOUTHEAST	36 FT	29.3 FT	1.8 FT	27.4 FT	-	-	-
NORTH	129 FT	-	-	27.4 FT	6.5 FT	21.0 FT	17.0 FT
SOUTH	129 FT	-	-	27.4 FT	6.5 FT	21.0 FT	17.0 FT
EAST	98 FT	-	-	27.4 FT	4.9 FT	22.5 FT	18.5 FT
WEST	98 FT	-	-	27.4 FT	4.9 FT	22.5 FT	18.5 FT

* FIELD ADJUSTMENTS AS REQUIRED

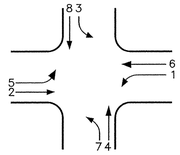
SIGNAL NOTES

7. SIGNING AND PAVEMENT MARKINGS ARE TABULATED ON SIGNING, STRIPING, AND CONDUIT PLAN.
8. ELECTRICAL SERVICE PROVIDED IN CONDUIT RUN *1 FROM THE UTILITY POLE NUMBERED " DP&L 42933*32328". TOWN OF MIDDLETOWN TO PROVIDE SERVICE.
9. EXISTING TYPE-7 ITMS JUNCTION WELL. SEE SIGNING, STRIPING, AND CONDUIT PLAN.
10. ITMS CONDUIT IS SHOWN FOR REFERENCE PURPOSES ONLY.
11. THE CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.
12. REMOVAL OF POLES AND SIGNAL CABLE COVERED UNDER ITEM NO. 746940.
13. INSTALLATION OF LOOP WIRE IN CONDUIT BETWEEN JUNCTION WELL AND LOOP IS INCIDENTAL TO ITEM NO. 746924.

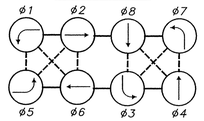
** REMOVAL OF EXISTING POLE BASES AND JUNCTION WELLS INCIDENTAL TO ITEM NO. 211000.

SG-01C

SIGNAL PHASING



NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM

1, 2, 5, 6, 9, 10, 13, 14 3, 4, 7, 8, 11, 12, 15, 16

LEGEND

AB	ABANDON	OH/*	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA/X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH/*	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA/X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB/X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO/*	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PB/X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO/*	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PL/X	EXISTING POLE IDENTIFIER (* OF POLE)
JW/X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL/X	PROPOSED POLE IDENTIFIER (* OF POLE)
JW/X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM/C	REMOVE BY CONTRACTOR
MA/XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM/O	REMOVE BY OTHERS
MA/XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM/TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE *1 - 6' x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
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TYPE *2 - 6' x 25' - TO BE INSTALLED ON SIDE STREET THROUGH AND LEFT TURN MOVEMENTS.
2. ALL SIGNAL POLES WILL BE 32 FEET, EXCEPT WHERE SHOWN.
3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
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RECOMMENDED Tony K. Fennell DATE: 12/18/2014

RECOMMENDED [signature] DATE: 5.18.15

RECOMMENDED _____ DATE: _____

APPROVED TRAFFIC ENGINEER [signature] DATE: 5/18/15

APPROVED FOR INSTALLATION
CHIEF TRAFFIC ENGINEER [signature] DATE: 5/19/15

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE
0 30 60 90
FEET

US 301
MARYLAND STATE LINE
TO LEVELS ROAD

CONTRACT	T200811301
COUNTY	NEW CASTLE
PERMIT NO.	N726
DESIGNED BY: TLM	
CHECKED BY: PAH	

SIGNAL PLAN
MIDDLETOWN WARWICK RD
/LEVELS RD

SHEET NO.	796
TOTAL SHTS.	850

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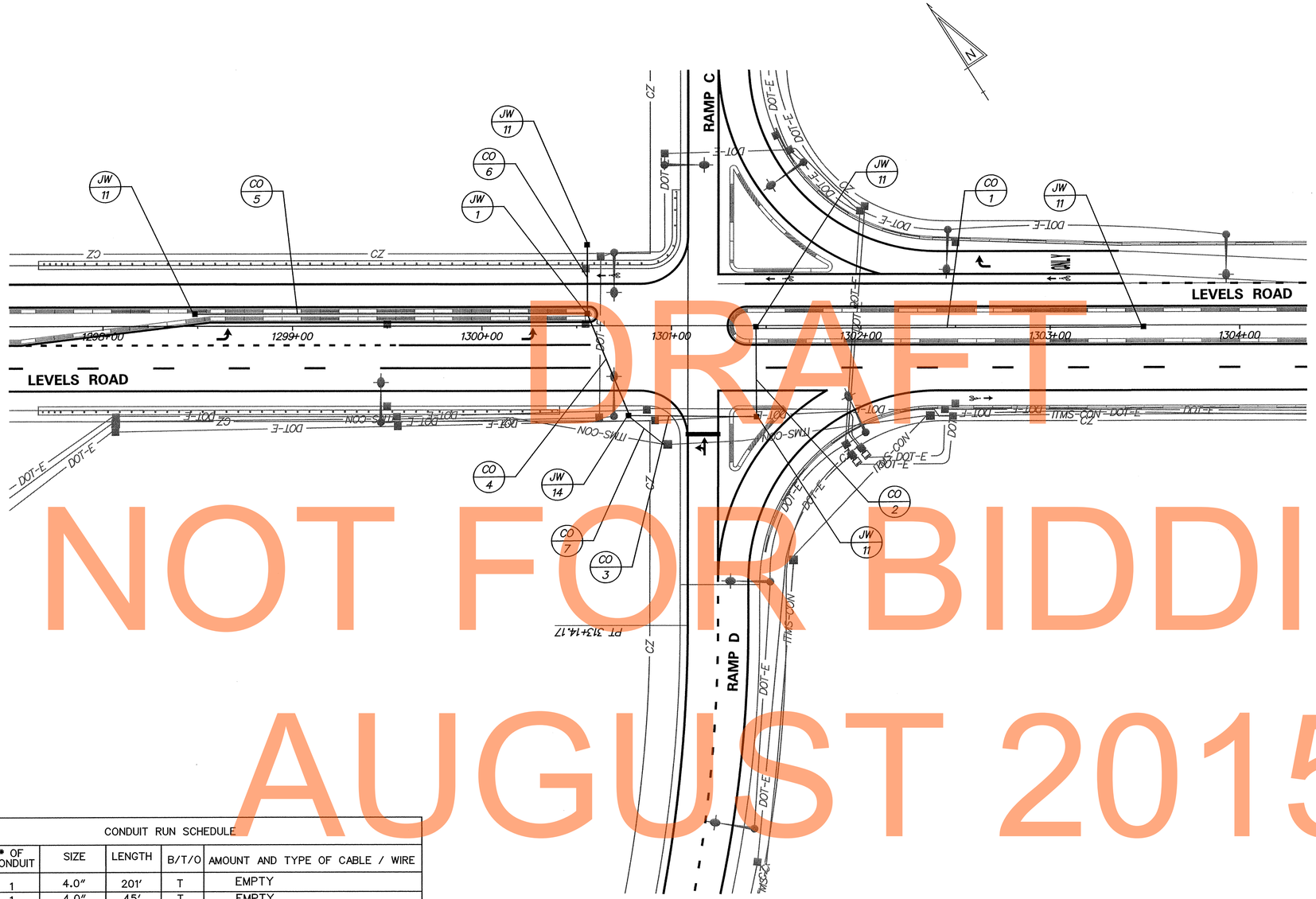

SIGNAL PHASING

UNDERGROUND ONLY

SIGNAL HEAD DIAGRAM

LEGEND

AB	ABANDON	OH •	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH •	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO •	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO •	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (* OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (* OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE #1 - 6'x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
TYPE #2 - 6'x 25' - TO BE INSTALLED ON MAIN STREET LEFT TURN MOVEMENTS.
TYPE #2 - 6'x 25' - TO BE INSTALLED ON SIDE STREET THROUGH AND LEFT TURN MOVEMENTS.

2. ALL SIGNAL POLES WILL BE 32 FEET, EXCEPT WHERE SHOWN.

3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.

5. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.

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SIGNAL NOTES

7. ITMS CONDUIT IS SHOWN FOR REFERENCE PURPOSE ONLY.

8. THE CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.

CONDUIT RUN SCHEDULE

CR *	* OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
1	1	4.0"	201'	T	EMPTY
2	1	4.0"	45'	T	EMPTY
3	1	4.0"	65'	T	EMPTY
4	1	4.0"	55'	T	EMPTY
5	1	4.0"	205'	T	EMPTY
6	1	4.0"	34'	T	EMPTY
7	1	4.0"	25'	T	EMPTY

* EXISTING CONDUIT B = BORE, T = TRENCH, O = OPEN CUT

ALL NEW CONDUITS ARE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.

SG-02

RECOMMENDED Tony K Fourier DATE: 12/18/2014

RECOMMENDED DATE: 5.18.15

RECOMMENDED DATE:

APPROVED TRAFFIC ENGINEER DATE: 5/19/15

APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER DATE: 5/19/15

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE
0 30 60 90
FEET

US 301
MARYLAND STATE LINE
TO LEVELS ROAD

CONTRACT T200811301
COUNTY NEW CASTLE
PERMIT NO. N789
DESIGNED BY: AB
CHECKED BY: PAH

SIGNAL PLAN
US 301 NB RAMPS
/LEVELS RD

SHEET NO. 797
TOTAL SHTS. 850

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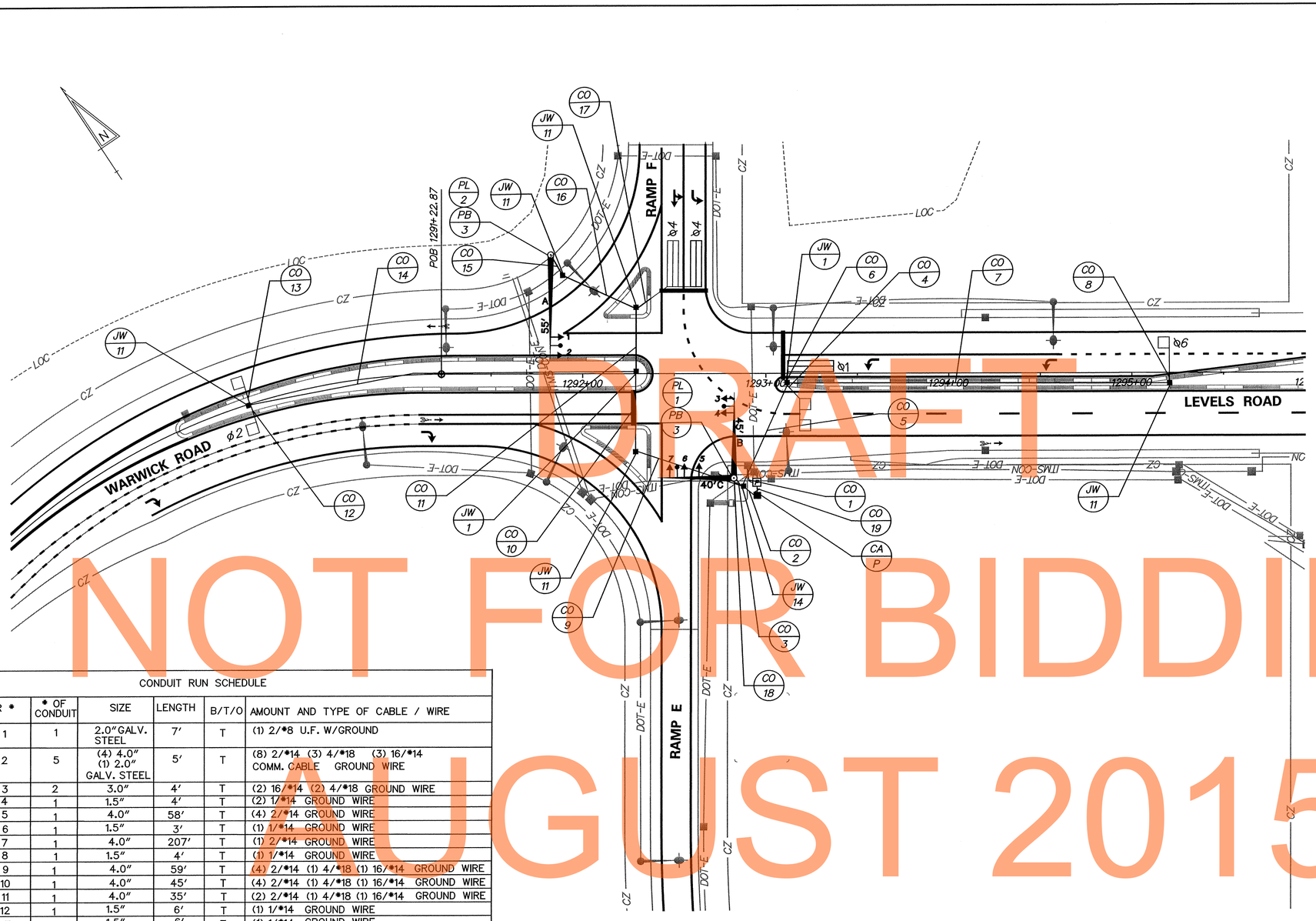
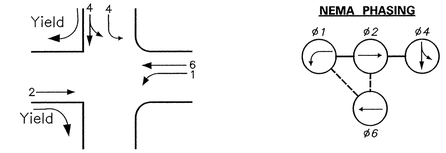


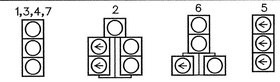
SIGNAL PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH-1	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA-X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH-*	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA-X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB-X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
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JW-X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM-C	REMOVE BY CONTRACTOR
MA-XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM-O	REMOVE BY OTHERS
MA-XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM-TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1	▭	▭
LOOP DETECTOR, TYPE 2	▭	▭
LUMINAIRE	—○—	—●—
MAST ARM	▷	▶
MICROWAVE DETECTION	—◐	—◐
OPTICOM RECEIVER	—○	—●
OVERHEAD SIGNING		—⊣
PEDESTRIAN POLE/BASE	○	⊗
PEDESTRIAN PUSHBUTTON	—○	—→
PEDESTRIAN SIGNAL HEAD	—▭	—■
RIGHT-OF-WAY	———	——R/W——
SERVICE PEDESTAL		P
SIGNAL CABINET	▭	■
SIGNAL HEAD	—▷	—▶
SIGNAL POLE/BASE	⊗	⊙
SPAN INSULATOR	◇	◆
SPAN WIRE	—XX—	—◇—
UTILITY POLE	⊘	◥
VIDEO DETECTION	▭	■

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE *1 - 6' x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
TYPE *2 - 6' x 25' - TO BE INSTALLED ON MAIN STREET LEFT TURN MOVEMENTS.
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2. ALL SIGNAL POLES WILL BE 32 FEET, EXCEPT WHERE SHOWN.

3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.

5. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.

6. 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.

CONDUIT RUN SCHEDULE					
CR *	* OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
1	1	2.0" GALV. STEEL	7'	T	(1) 2/*8 U.F. W/GROUND
2	5	(4) 4.0" (1) 2.0" GALV. STEEL	5'	T	(8) 2/*14 (3) 4/*18 (3) 16/*14 COMM. CABLE GROUND WIRE
3	2	3.0"	4'	T	(2) 16/*14 (2) 4/*18 GROUND WIRE
4	1	1.5"	4'	T	(2) 1/*14 GROUND WIRE
5	1	4.0"	58'	T	(4) 2/*14 GROUND WIRE
6	1	1.5"	3'	T	(1) 1/*14 GROUND WIRE
7	1	4.0"	207'	T	(1) 2/*14 GROUND WIRE
8	1	1.5"	4'	T	(1) 1/*14 GROUND WIRE
9	1	4.0"	59'	T	(4) 2/*14 (1) 4/*18 (1) 16/*14 GROUND WIRE
10	1	4.0"	45'	T	(4) 2/*14 (1) 4/*18 (1) 16/*14 GROUND WIRE
11	1	4.0"	35'	T	(2) 2/*14 (1) 4/*18 (1) 16/*14 GROUND WIRE
12	1	1.5"	6'	T	(1) 1/*14 GROUND WIRE
13	1	1.5"	6'	T	(1) 1/*14 GROUND WIRE
14	1	4.0"	211'	T	(2) 2/*14 GROUND WIRE
15	2	3.0"	11'	T	(1) 16/*14 (1) 4/*18 GROUND WIRE
16	1	4.0"	41'	T	(1) 16/*14 (1) 4/*18 GROUND WIRE
17	1	1.5"	9'	T	(2) 1/*14 GROUND WIRE
18	1	4.0"	14'	T	COMM. CABLE GROUND WIRE
19	1	2.0" GALV. STEEL	4'	T	(1) 2/*8 U.F. W/GROUND

B = BORE, T = TRENCH, O = OPEN CUT
ALL NEW CONDUITS ARE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.

MAST ARM SCHEDULE			
MAST ARM	LENGTH	SIGNAL HEAD	SIGNAL HEAD LOCATION
A	55'	1, 2	43', 53'
B	45'	3, 4	32', 40'
C	40'	5, 6, 7	18', 26', 34'

SIGNAL NOTES

7. ITMS CONDUIT IS SHOWN FOR REFERENCE PURPOSE ONLY.

8. TRANSFORMER AND DISCONNECT TO BE PROVIDED BY OTHERS AND SIZED BASED ON THE LOAD CHART ON SHEET LI-25.

9. THE CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.

10. INSTALLATION OF LOOP WIRE IN CONDUIT BETWEEN JUNCTION WELL AND LOOP IS INCIDENTAL TO ITEM NO. 746924.

SG-03

RECOMMENDED Terry K Fowler DATE: 12/18/2014
RECOMMENDED [signature] DATE: 5.18.15
RECOMMENDED _____ DATE: _____
APPROVED TRAFFIC ENGINEER [signature] DATE: 6/18/15
APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER [signature] DATE: 5/19/15

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

US 301 MARYLAND STATE LINE TO LEVELS ROAD

CONTRACT	PERMIT NO.	N788
T200811301	DESIGNED BY: AB	
COUNTY	CHECKED BY: PAH	
NEW CASTLE		

SIGNAL PLAN US 301 SB RAMPS /LEVELS RD

SHEET NO.	TOTAL SHTS.
798	850

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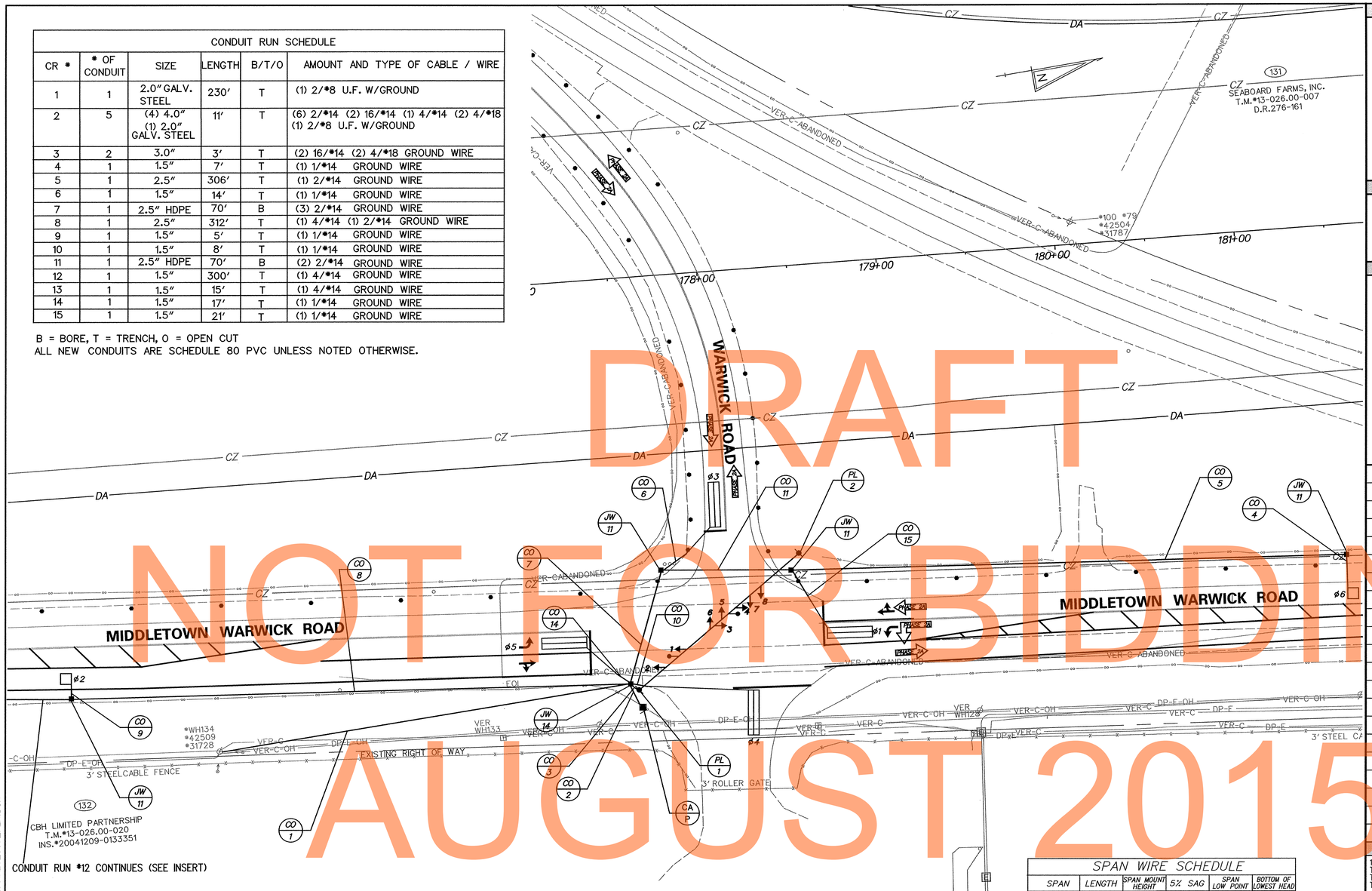
CONDUIT RUN SCHEDULE					
CR *	* OF CONDUIT	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
1	1	2.0" GALV. STEEL	230'	T	(1) 2/#8 U.F. W/GROUND
2	5	(4) 4.0" (1) 2.0" GALV. STEEL	11'	T	(6) 2/#14 (2) 16/#14 (1) 4/#14 (2) 4/#18 (1) 2/#8 U.F. W/GROUND
3	2	3.0"	3'	T	(2) 16/#14 (2) 4/#18 GROUND WIRE
4	1	1.5"	7'	T	(1) 1/#14 GROUND WIRE
5	1	2.5"	306'	T	(1) 2/#14 GROUND WIRE
6	1	1.5"	14'	T	(1) 1/#14 GROUND WIRE
7	1	2.5" HDPE	70'	B	(3) 2/#14 GROUND WIRE
8	1	2.5"	312'	T	(1) 4/#14 (1) 2/#14 GROUND WIRE
9	1	1.5"	5'	T	(1) 1/#14 GROUND WIRE
10	1	1.5"	8'	T	(1) 1/#14 GROUND WIRE
11	1	2.5" HDPE	70'	B	(2) 2/#14 GROUND WIRE
12	1	1.5"	300'	T	(1) 4/#14 GROUND WIRE
13	1	1.5"	15'	T	(1) 4/#14 GROUND WIRE
14	1	1.5"	17'	T	(1) 1/#14 GROUND WIRE
15	1	1.5"	21'	T	(1) 1/#14 GROUND WIRE

B = BORE, T = TRENCH, O = OPEN CUT
ALL NEW CONDUITS ARE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.



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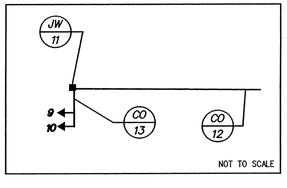


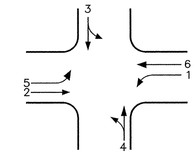
SIGNAL NOTES

7. ELECTRICAL SERVICE TO BE PROVIDED IN CONDUIT RUN #1 FROM DELMARVA POLE #42509-31728.
8. TEMPORARY SIGNING AND TEMPORARY PAVEMENT MARKINGS ARE SHOWN ON THE CONSTRUCTION PHASING PLANS.
9. SIGNAL SHALL BE OPERATIONAL PRIOR TO PHASE 2 OF CONSTRUCTION AND SHOULD BE REMOVED UPON CONCLUSION OF PHASE 2 CONSTRUCTION ACTIVITIES.
10. THE CONTRACTOR SHALL RETURN SIGNAL EQUIPMENT TO DELDOT TRAFFIC AFTER PHASE 2 CONSTRUCTION ACTIVITIES.
11. RELOCATE EXISTING ADVANCE FLASHER ASSEMBLY FROM THE NB APPROACH TO LEVELS ROAD TO A LOCATION APPROXIMATELY 600 FOOT SOUTH OF THE TEMPORARY SIGNAL WHERE THE EXISTING INTERSECTION WARNING SIGN IS LOCATED AND WILL BE REMOVED AS PART OF THIS PROJECT.
12. THE CONTRACTOR SHALL CONTACT DELDOT SIGNAL CONSTRUCTION AT 302-222-5920 10 DAYS PRIOR TO ANY WORK.
13. INSTALLATION OF LOOP WIRE IN CONDUIT BETWEEN JUNCTION WELL AND LOOP IS INCIDENTAL TO ITEM NO. 746924.

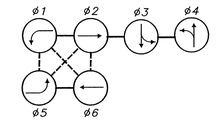
SPAN WIRE SCHEDULE					
SPAN	LENGTH	SPAN MOUNT HEIGHT	5% SAG	SPAN LOW POINT	BOTTOM OF LOWEST HEAD
NORTHWEST	114 FT	28 FT	5.7 FT	22.3 FT	18.3 FT

* FIELD ADJUSTMENTS AS REQUIRED

SIGNAL PHASING



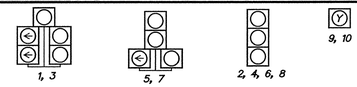
NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OHI/*	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA/X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH/*	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA/X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PBI/X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO/*	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PB/X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO/*	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PL/X	EXISTING POLE IDENTIFIER (* OF POLE)
JW/X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL/X	PROPOSED POLE IDENTIFIER (* OF POLE)
JW/X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM/C	REMOVE BY CONTRACTOR
MA/XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM/O	REMOVE BY OTHERS
MA/XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM/TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. LOOP DETECTORS:
TYPE #1 - 6' x 6' - TO BE INSTALLED ON MAIN STREET THROUGH MOVEMENTS.
TYPE #2 - 6' x 25' - TO BE INSTALLED ON MAIN STREET LEFT TURN MOVEMENTS.
TYPE #2 - 6' x 25' - TO BE INSTALLED ON SIDE STREET THROUGH AND LEFT TURN MOVEMENTS.
2. SIGNAL SPAN POLES SHALL BE 45' CLASS II WOOD POLES.
3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
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SG-04

RECOMMENDED Tony K. Fennell DATE: 12/18/2014
RECOMMENDED DATE: 5.18.15
RECOMMENDED DATE:
APPROVED TRAFFIC ENGINEER DATE: 5/18/15
APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER DATE: 5/19/15

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE
0 30 60 90
FEET

US 301
MARYLAND STATE LINE
TO LEVELS ROAD

CONTRACT T200811301
COUNTY NEW CASTLE
PERMIT NO. N790
DESIGNED BY: TLM
CHECKED BY: PAH

TEMPORARY SIGNAL PLAN
MIDDLETOWN WARWICK RD
/WARWICK RD PHASE 2

SHEET NO. 799
TOTAL SHTS. 850

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