LEGEND

(LST X) (LST X)	LIGHTING STANDARD IDENTIFIER (BY OTHERS AND PROPOSED)
(LSR X) (LSR X)	LIGHTING SERVICE RUN IDENTIFIER (BY OTHERS AND PROPOSED)
(JW X) (JW X)	JUNCTION WELL & TYPE (EXISTING AND PROPOSED)
(WP X) (WP X)	UNDERPASS WALL LIGHTER (EXISTING AND PROPOSED)
	EXISTING LIGHTING STANDARD
	PROPOSED COBRAHEAD LUMINAIRE, SINGLE DAVIT ARM (BY OTHERS)
	PROPOSED COBRAHEAD LUMINAIRE, SINGLE DAVIT ARM
P	PROPOSED METERED SERVICE PEDESTAL
	PROPOSED WALL LIGHTER - TYPE 'WP' FIXTURES ON BRIDGE WALL
LC-XX	PROPOSED LIGHTING CONTROL CABINET
LC-XX	EXISTING LIGHTING CONTROL CABINET
	PROPOSED DISCONNECT SWITCH
DOT-E1	PROPOSED LIGHTING CONDUIT
DOT-E	ITMS/TOLL GANTRY POWER CONDUIT (BY OTHERS)
DOT-E1	LIGHTING CONDUIT (BY OTHERS)
	PROPOSED GROUND ROD
J.W.	EXISTING JUNCTION WELL
J.W.	PROPOSED JUNCTION WELL
J.B.	PROPOSED STRUCTURE MOUNTED JUNCTION BOX
(RM O)	REMOVE BY OTHERS
(RM C)	REMOVE BY CONTRACTOR
(RL C)	RELOCATE BY CONTRACTOR
(AB)	ABANDON
	FUTURE POWER POLE (BY OTHERS)
	EXISTING POLE AS INDICATED
T	FUTURE POLE MOUNTED TRANSFORMER (BY OTHERS)

GENERAL NOTES (LIGHTING)

1. THIS CONTRACT (T200911303) INCLUDES ROADWAY LIGHTING ASSOCIATED WITH THE CONSTRUCTION OF SECTION 2 OF US 301 BETWEEN NORTH OF LEVELS ROAD AND EAST OF NORFOLK SOUTHERN RAILROAD INCLUDING RAMPS, ROUNDABOUTS AND CONNECTOR ROAD TO SUMMIT BRIDGE ROAD. FOR SPUR ROAD RAMPS, THE LIGHTING POLES DIRECT BURIED CONDUITS AND CONDUCTORS WILL BE INSTALLED UNDER CONTRACT T200911307. THE SERVICE DROP LIGHT DISTRIBUTION CABINET AND UNDERGROUND CONDUITS UNDER US 301 PAVEMENT WILL BE UNDER THIS CONTRACT. COMPLEX INTERSECTION LIGHTING AT EXISTING ARMSTRONG CORNER/MARL PIT ROAD AND PROPOSED CONNECTOR ROAD WILL BE DONE UNDER SEPERATE CONTRACT, T201011301.

2. ALL ELECTRICAL WORK SHALL BE PERFORMED AND ALL MATERIAL PROVIDED SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, TO ALL LOCAL AND SPECIAL LAWS, AND/OR TO ORDINANCES GOVERNING SUCH MATERIAL. CODE SHALL BE CONSIDERED THE MINIMUM REQUIREMENTS FOR THE ELECTRICAL WORK AND IF THERE IS A CONFLICT BETWEEN THE REQUIREMENTS SPECIFIED IN THE CONTRACT DOCUMENTS AND THE CODE, THE MORE STRINGENT REQUIREMENT WILL APPLY AS DETERMINED AND APPROVED BY THE ENGINEER. WHEN THESE REQUIREMENTS DO NOT GOVERN, AND WHERE NOT OTHERWISE SPECIFIED, ELECTRICAL MATERIALS SHALL CONFORM TO THE STANDARDIZATION RULES OF THE INSTITUTE OF ELECTRICAL ENGINEERS.

3. THE CONTRACTOR SHALL PROVIDE AND SECURE ALL ELECTRICAL INSPECTIONS AS REQUIRED AND PAY FOR THE SAME. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AT HIS EXPENSE ALL NECESSARY PERMITS AND CERTIFICATES AS REQUIRED.

4. THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL THE CONTRACTORS INVOLVED ON THIS PROJECT. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND THE GENERAL SUPERINTENDENT THE LOCATIONS OF ALL CONDUIT, HANDHOLES, POLE BASES, LIGHTING DISTRIBUTION CABINETS, ETC. TO ELIMINATE CONSTRUCTION CONFLICTS.

5. BURIED ELECTRICAL CABLE AND CONDUIT, AND OTHER UTILITIES MAY EXIST THROUGHOUT THIS PROJECT. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PREVENTING DAMAGE TO THEM, AND MAINTAINING THEM IN SERVICE WHEN AND WHERE REQUIRED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES BY HAND EXCAVATION PRIOR TO TRENCHING BY MACHINE.

6. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK MATERIAL AND LABOR TO BE FREE FROM DEFECTS FOR A ONE YEAR PERIOD FROM THE TIME OF OWNER ACCEPTANCE. ANY DEFECTS OCCURRING DURING THIS PERIOD SHALL BE CORRECTED BY THE ELECTRICAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

7. CONDUIT RUNS AND JUNCTION WELLS ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL LOCATE THE CONDUIT RUNS AND INSTALL JUNCTION WELLS IN A MANNER THAT AVOIDS CONFLICTS WITH ALL EXISTING AND PROPOSED FEATURES AS FIELD CONDITIONS DICTATE AND AS APPROVED BY THE ENGINEER.

8. COLOR CODING SHALL BE PROVIDED THROUGHOUT THE ENTIRE NETWORK FOR SERVICE,FEEDER, BRANCH AND CONTROL CONDUCTORS. EACH PHASE SHALL BE AN INDEPENDENT COLOR. CONDUCTORS SHALL HAVE FACTORY IMPREGNATED COLOR THROUGHOUT THEIR ENTIRE LENGTH. PHASE TAPING IS NOT PERMITTED.

9. THE CONTRACTOR SHALL NOTIFY DELMARVA POWER TWO WEEKS IN ADVANCE TO ARRANGE FINAL POWER CONNECTIONS.

10. ALL FUSED CONNECTIONS SHALL BE MADE IN THE POLE BASE. SPLICES IN JUNCTION BOXES PULL BOXES SHALL NOT BE FUSED.

11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT SITE PRIOR TO WORK.

12. WORK INCLUDES FURNISHING LABOR,MATERIAL,EQUIPMENT AND SERVICE NECESSARY AND INCIDENTAL TO PROPER COMPLETION OF THE ELECTRICAL WORK AS SHOWN. MINOR ITEMS,ACCESSORIES OR DEVICES NECESSARY FOR COMPLETION AND PROPER OPERATION OF ANY SYSTEM SHALL BE PROVIDED WHETHER OR NOT THEY ARE SPECIFICALLY CALLED FOR BY SPECIFICATIONS OR DRAWINGS.

13. ALL CONDUITS, JUNCTION WELLS, LIGHTING STANDARDS, ETC. SHALL BE STAKED OUT AND EVERY LOCATION APPROVED BY THE ENGINEER BEFORE ANY WORK IS DONE.

14. ALL STATION, OFFSET AND DIMENSION INFORMATION SHOWN FOR PROPOSED LIGHTING STANDARDS IS TO THE CENTER OF THE POLE BASE.

15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF LIGHTING CONDUITS WITH ITMS AND TOLL BOOTH POWER/COMMUNICATION CONDUITS. TOLL BOOTH/ITMS AND LIGHTING CONDUITS MAY SHARE A COMMON TRENCH BUT SHALL NOT SHARE COMMON JUNCTION WELLS.

16. ELECTRICAL CABLES SHALL BE REMOVED FROM ALL CONDUITS DESIGNATED TO BE ABANDONED. ABANDONED CONDUITS SHALL BE CUT A MINIMUM OF ONE FOOT BELOW FINISHED GRADE AND SHALL BE CAPPED AT BOTH ENDS.

17. EXISTING ROADWAY LIGHTING CONDUITS AND CABLES SHALL REMAIN UNLESS NOTED OTHERWISE ON THE PLANS.

18. SPLICES FOR ALL ROADWAY LIGHTING ELECTRICAL CABLES, INCLUDING RE-CONNECTION OF EXISTING IMPACTED ELECTRICAL CABLES, SHALL BE COMPLETED USING APPROVED SPLICE KITS OR METHODS APPROVED BY THE ENGINEER AND SHALL BE INCIDENTAL TO THE SUPPLY AND INSTALLATION OF VARIOUS ROADWAY LIGHTING ELECTRICAL CABLES.

19. ALL PROPOSED DAVIT ARM LIGHTING STANDARDS SHALL BE INSTALLED WITH BREAKAWAY TRANSFORMER BASES, WHETHER PROTECTED OR UNPROTECTED, UNLESS OTHERWISE NOTED.

20. PAYMENT FOR REMOVAL OF EXISTING JUNCTION WELLS SHALL BE MADE UNDER ITEM 744525.

21. PAYMENT FOR RELOCATION OF EXISTING LIGHT POLES AND ASSOCIATED ELECTRICAL EQUIPMENT SHALL BE MADE UNDER ITEM 746509.

22. UNDERGROUND CONDUITS SHALL BE SLOPED TO DRAIN TO THE NEAREST JUNCTION WELL. IF THIS CANNOT BE ACCOMPLISHED, PROVIDE A DRAINAGE TEE AT LOW POINT OF CONDUIT RUN. THE COST OF THIS WILL BE INCIDENTAL TO THE CONDUIT PAY ITEM.

23. ALL GROUNDING CONDUCTORS IN PROPOSED UNDERGROUND CONDUITS SHALL BE INSULATED STRANDED COPPER WITH SIZE AS NOTED IN LIGHTING SERVICE SCHEDULE.

24. THE CONTRACTOR SHALL VERIFY THE OPERATING VOLTAGE OF ALL CIRCUITS OF THE EXISTING LIGHTING SYSTEMS THAT ARE BEING TIED INTO TO ENSURE COMPATIBILITY WITH PROPOSED LUMINAIRES.

25. ALL PROPOSED ROADWAY LIGHTING CONDUITS (SERVICE RUNS) SHALL BE RIGID GALVANIZED STEEL AND/OR PVC SCHEDULE 80 AS SHOWN ON PLAN SHEETS. WHEREVER EMPTY CONDUITS ARE SHOWN FOR FUTURE USE, PROVIDE NYLON ROPE PULL STRINGS.

26. ALL PROPOSED LIGHTING STANDARDS SHALL BE INSTALLED ON POLE BASES FOR A THIRTY (30) OR FORTY (40) FOOT NOMINAL MOUNTING HEIGHT AS INDICATED IN THE LIGHTING STANDARD SCHEDULE AND AS NOTED IN DETAILS.

27. PROVIDE ADDITIONAL LENGTH OF GROUND WIRE (MAX. 10') AT EACH JUNCTION WELL FOR POTENTIAL GROUNDING/BONDING PURPOSES.

28. ALL LIGHTING CONTROL CENTER PANELBOARDS SHALL HAVE BOLT-IN CIRCUIT BREAKERS.

29. PRIOR TO ROADWAY CONSTRUCTION LIGHTING CONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION UNDER PROPOSED ROADWAY VIA TRENCHING METHOD WITH GENERAL CONTRACTOR.

30. ALL EXPOSED CONDUITS FROM GRADE TO EQUIPMENT/ALONG POLE WILL BE RGS. ALL UNDERGROUND CONDUIT WILL BE PVC SCHEDULE 80, UNLESS NOTED OTHERWISE. PROVIDE RGS BENDS AS REQUIRED WHEN TRANSITIONING FROM UNDERGROUND TO EXPOSED.

$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303 / COUNTY NEW CASTLE; BRIDGE NO.; DESIGNED BY: A. AGGARWAL; CHECKED BY: D. L. BAKER	LIGHTING PLAN GENERAL NOTES AND LEGEND

LI-01 | SHEET NO. 1000 | TOTAL SHTS. 1256

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-8	LR-SB CCT#5	44+65.00 B/L RAMP F	44.50' RT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-9	LR-SB CCT#1	43+70.00 B/L RAMP F	32.66' LT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-10	LR-SB CCT#3	43+09.33 B/L RAMP F	32.75' RT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-6	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	BRIDGE BARRIER	LTG CCT FROM DISTRIBUTION CABINET LR-SB
LSR-6A	35	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - BRIDGE BARRIER TO JW	
LSR-7	83	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-8	63	2 (ONE SPARE)	3" PVC	(2)#6, (1)#6 GROUND (CCT 1)	TRENCH (PROPOSED PAVEMENT)	
LSR-9	10	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 1)	TRENCH	
LSR-10	70	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
*LSR-10A	150	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)		

* CONTINUED TO DWG. LI-03
** CONTINUED FROM DWG. LI-05, LSR DISTANCE SHOWN ON LI-05

NOTES:

1. LIGHTING SERVICE RUN THROUGH BRIDGE BARRIER. REFER TO LI-30 AND BRIDGE 1-479 DRAWINGS FOR CONDUIT AND BARRIER DETAILS. EMPTY CONDUITS WITH PULL STRINGS WILL BE INSTALLED BY STRUCTURE CONTRACTOR.
2. LIGHTING DISTRIBUTION CABINET LR-SB AND 3 PHASE CIRCUITS 1, 3 AND 5 ARE BEING PROVIDED UNDER CONTRACT T200811301.
3. COORDINATE WITH GUARD RAIL CONTRACTOR FOR POST SPACING TO BE 3'-1½" C/C.
4. JUNCTION BOX IN BARRIER WILL BE INSTALLED BY STRUCTURE CONTRACTOR. REFER TO LI-30 FOR DETAILS.

$FILES
$DATES
$USERS

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

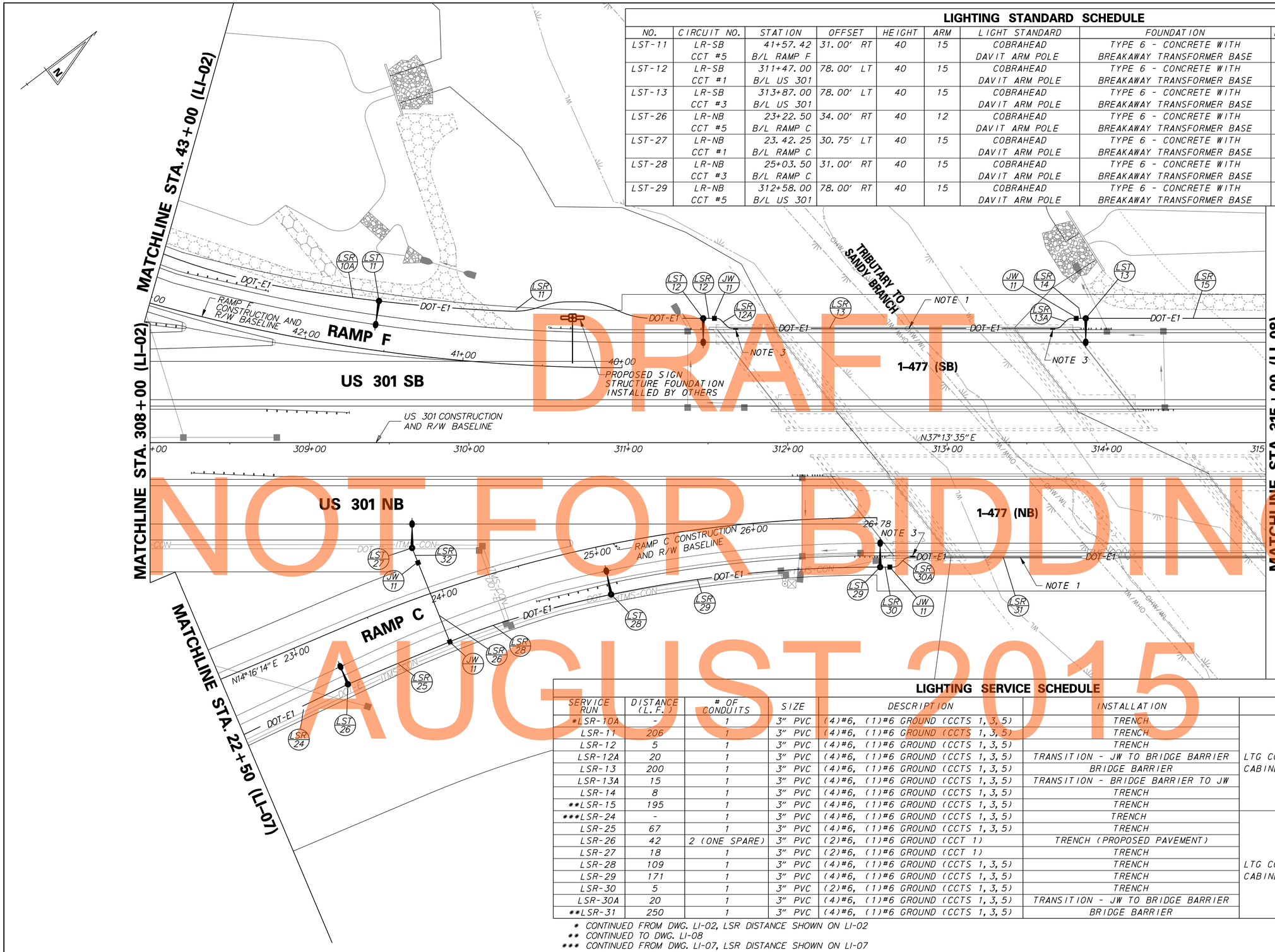
SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: A. AGGARWAL	
CHECKED BY: D. L. BAKER	

LIGHTING PLAN

	LI-02
SHEET NO.	1001
TOTAL SHTS.	1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-11	LR-SB CCT #5	41+57.42 B/L RAMP F	31.00' RT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-12	LR-SB CCT #1	311+47.00 B/L US 301	78.00' LT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-13	LR-SB CCT #3	313+87.00 B/L US 301	78.00' LT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-26	LR-NB CCT #5	23+22.50 B/L RAMP C	34.00' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-27	LR-NB CCT #1	23.42.25 B/L RAMP C	30.75' LT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-28	LR-NB CCT #3	25+03.50 B/L RAMP C	31.00' RT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-29	LR-NB CCT #5	312+58.00 B/L US 301	78.00' RT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-10A	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-11	206	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-12	5	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-12A	20	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - JW TO BRIDGE BARRIER	LTG CCT FROM DISTRIBUTION
LSR-13	200	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	BRIDGE BARRIER	CABINET LR-SB
LSR-13A	15	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - BRIDGE BARRIER TO JW	
LSR-14	8	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
**LSR-15	195	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
***LSR-24	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-25	67	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-26	42	2 (ONE SPARE)	3" PVC	(2)#6, (1)#6 GROUND (CCT 1)	TRENCH (PROPOSED PAVEMENT)	
LSR-27	18	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 1)	TRENCH	
LSR-28	109	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION
LSR-29	171	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	CABINET LR-NB
LSR-30	5	1	3" PVC	(2)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-30A	20	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - JW TO BRIDGE BARRIER	
**LSR-31	250	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	BRIDGE BARRIER	

* CONTINUED FROM DWG. LI-02, LSR DISTANCE SHOWN ON LI-02
** CONTINUED TO DWG. LI-08
*** CONTINUED FROM DWG. LI-07, LSR DISTANCE SHOWN ON LI-07

NOTES:

1. LIGHTING SERVICE RUN THROUGH BRIDGE BARRIER. REFER TO LI-30 AND BRIDGE 1-477 DRAWINGS FOR CONDUIT AND BARRIER DETAILS. EMPTY CONDUITS WITH PULL STRINGS WILL BE INSTALLED BY STRUCTURE CONTRACTOR.
2. LIGHTING DISTRIBUTION CABINET LR-SB ,LR-NB AND 3 PHASE CIRCUITS 1, 3 AND 5 ARE BEING PROVIDED UNDER CONTRACT T200811301.
3. JUNCTION BOX IN BARRIER WILL BE INSTALLED BY STRUCTURE CONTRACTOR. REFER TO LI-30 FOR DETAILS.

$USERS $DATES $FILES

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: A. AGGARWAL	
CHECKED BY: D. L. BAKER	

LIGHTING PLAN

LI-03
SHEET NO. 1002
TOTAL SHTS. 1256

PANEL DESIGNATION	TYPE: THREE PHASE 4W NUMBER OF POLES: 20 GROUND BUS RATING: 100% MAIN BUS RATING: 100A MAIN RATING: 50A 3P MCB	LOCATION: LEVELS ROAD WITH RAMP E VOLTAGE: 277/480 VAC PANEL MOUNTING: PAD PANEL ENCLOSURE (NEMA): TYPE 3R PANEL MIN. A.I.C. RATING: 10KA
LR-SB		

CIR. NO.	CIR. BKR.	DESCRIPTION	LOAD/PHASE LOAD	L1	L2	L3	LOAD	DESCRIPTION	CIR. BKR.	CIR. NO.
1	15A	CIRCUIT "A" (RAMP F)	1080	2010			930	CIRCUIT "B" (RAMP E)	15A	2
3			1080		2010		930			4
5			900			1520	620			6
7	15A	CIRCUIT "C" (INTERSECTION)	570	2570			2000	2KVA XFMR	15A	8
9			570		1170		600	PHOTO CONTROL & CONTACTOR	15A	10
11			570			570		SPARE	15A	12
				4580	3180	2090				

TOTAL CONNECTED VA LOAD 7,360

CU EQUIPMENT GROUND BUS
100% SOLID NEUTRAL BUS

'LR-SB' PANEL SCHEDULE

(PROVIDED UNDER CONTRACT T200811301)

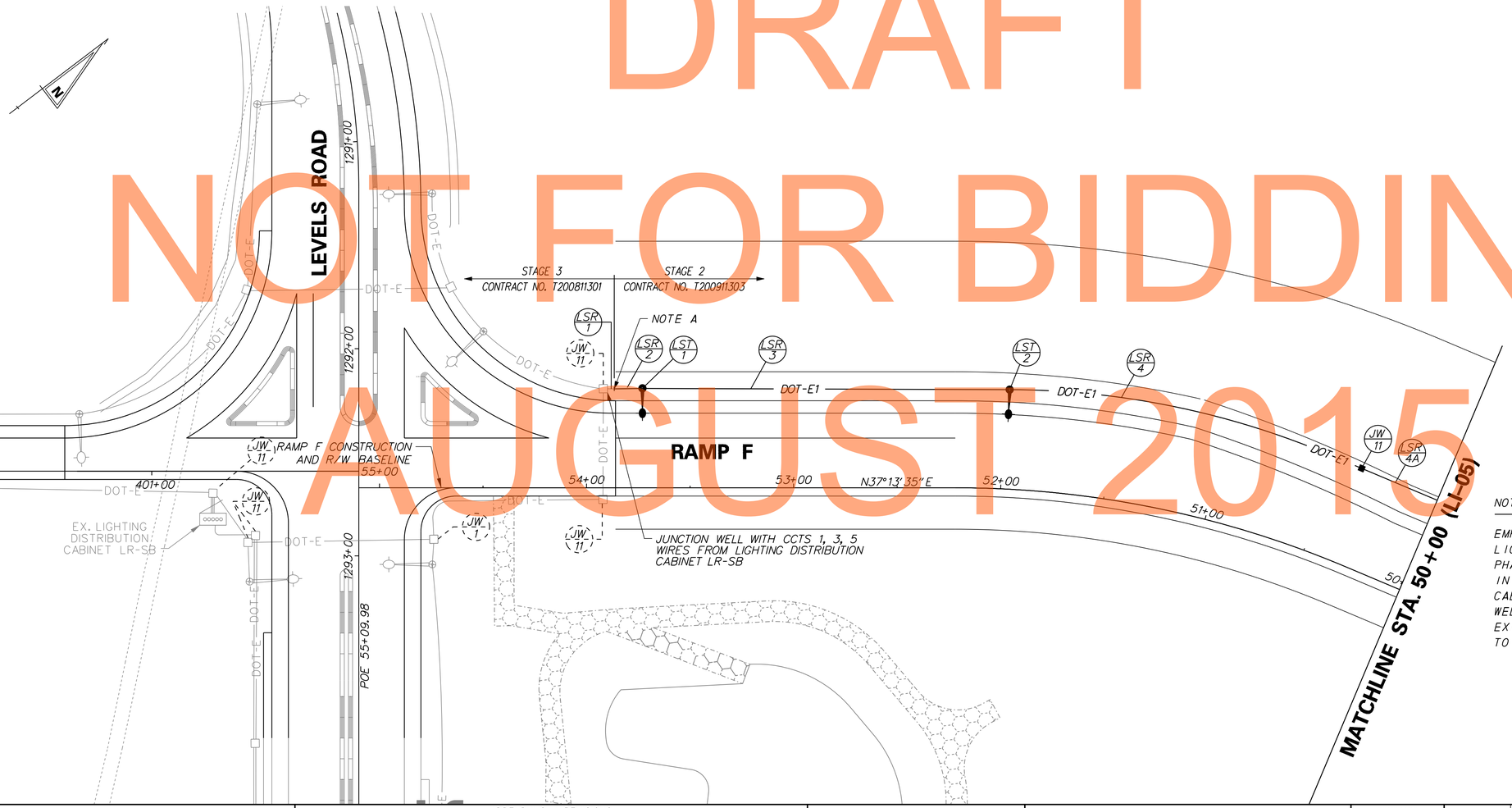
LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-1	LR-SB CCT #1	53+73.00 B/L RAMP F	48.00' RT	30'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS
LST-2	LR-SB CCT #3	51+98.00 B/L RAMP F	48.00' RT	30'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-1	6	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	EMPTY CONDUIT PROVIDED UNDER CONTRACT T200811301. CIRCUIT EXISTS AT FIRST JUNCTION WELL UPSTREAM, SEE NOTE A
LSR-2	15	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-SB
LSR-3	178	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-4	176	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
*LSR-4A	175	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	

* CONTINUED TO DWG. LI-05
** COORDINATE WITH CONTRACTOR OF CONTRACT T200811301 FOR EXTENDING THE EXISTING CONDUIT AND PROVIDING SPLICES AT THE EXISTING UPSTREAM JUNCTION WELL.



NOTE A:

EMPTY 3" DIAMETER PVC CONDUIT FOR RAMP F LIGHTING POLES PROVIDED BY OTHERS. THREE PHASE CIRCUITS 1, 3, 5 WITH 4-#4 AND 1-#4 GROUND IN EXISTING CONDUIT FROM LIGHTING DISTRIBUTION CABINET LR-SB EXISTS COILED UP IN THE JUNCTION WELL UPSTREAM. PROVIDE COUPLING/ADAPTER AT EXISTING CONDUIT END. EXTEND WITH 3" PVC CONDUIT TO POLE LST-1.

$USER$ $DATE$ $FILE$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

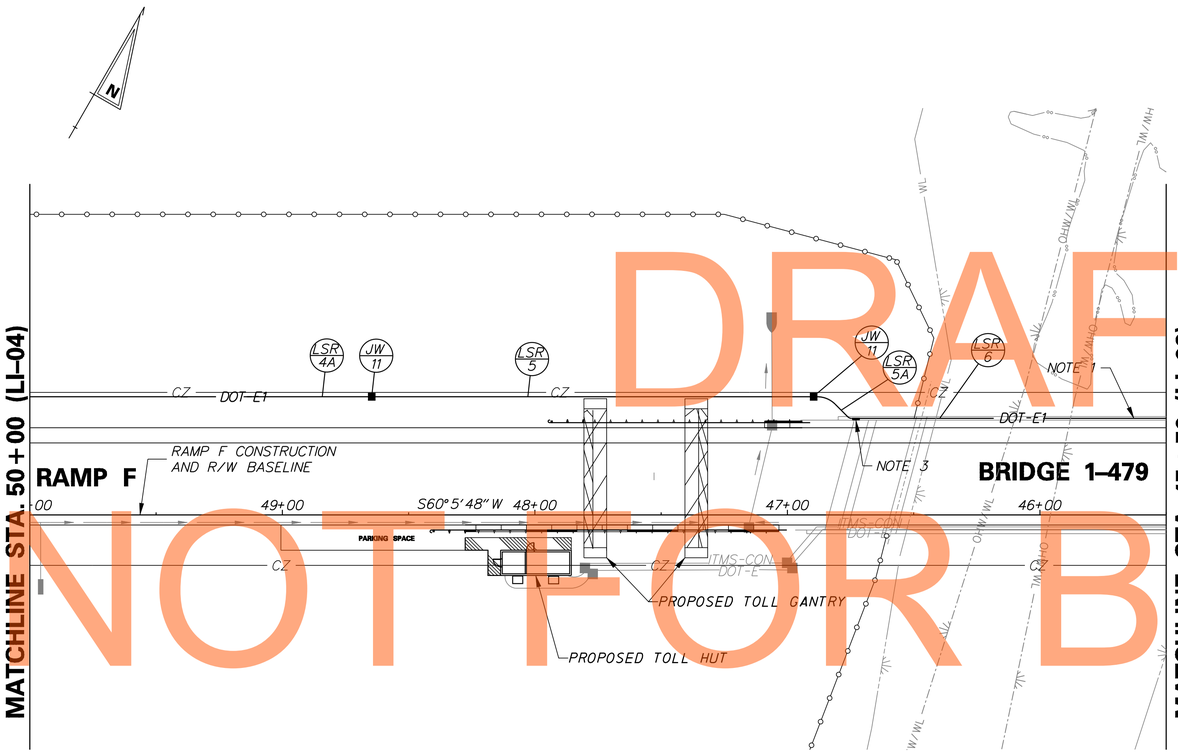
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

LI-04
SHEET NO.
1003
TOTAL SHTS.
1256



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-4A	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-5	175	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-SB
LSR-5A	20	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - BRIDGE BARRIER TO JW	
**LSR-6	190	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	BRIDGE BARRIER	

* CONTINUED FROM DWG. LI-04, LSR DISTANCE SHOWN ON LI-04
** CONTINUED TO DWG. LI-02

NOTES:

1. LIGHTING SERVICE RUN THROUGH BRIDGE BARRIER. REFER TO LI-30 AND BRIDGE 1-479 DRAWINGS FOR CONDUIT AND BARRIER DETAILS. EMPTY CONDUITS WITH PULL STRINGS WILL BE INSTALLED BY STRUCTURE CONTRACTOR.
2. LIGHTING DISTRIBUTION CABINET LR-SB AND 3 PHASE CIRCUITS 1, 3 AND 5 ARE BEING PROVIDED UNDER CONTRACT T200811301.
3. JUNCTION BOX IN BARRIER WILL BE INSTALLED BY STRUCTURE CONTRACTOR. REFER TO LI-30 FOR DETAILS.

$USER$ $DATE$ $FILE$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

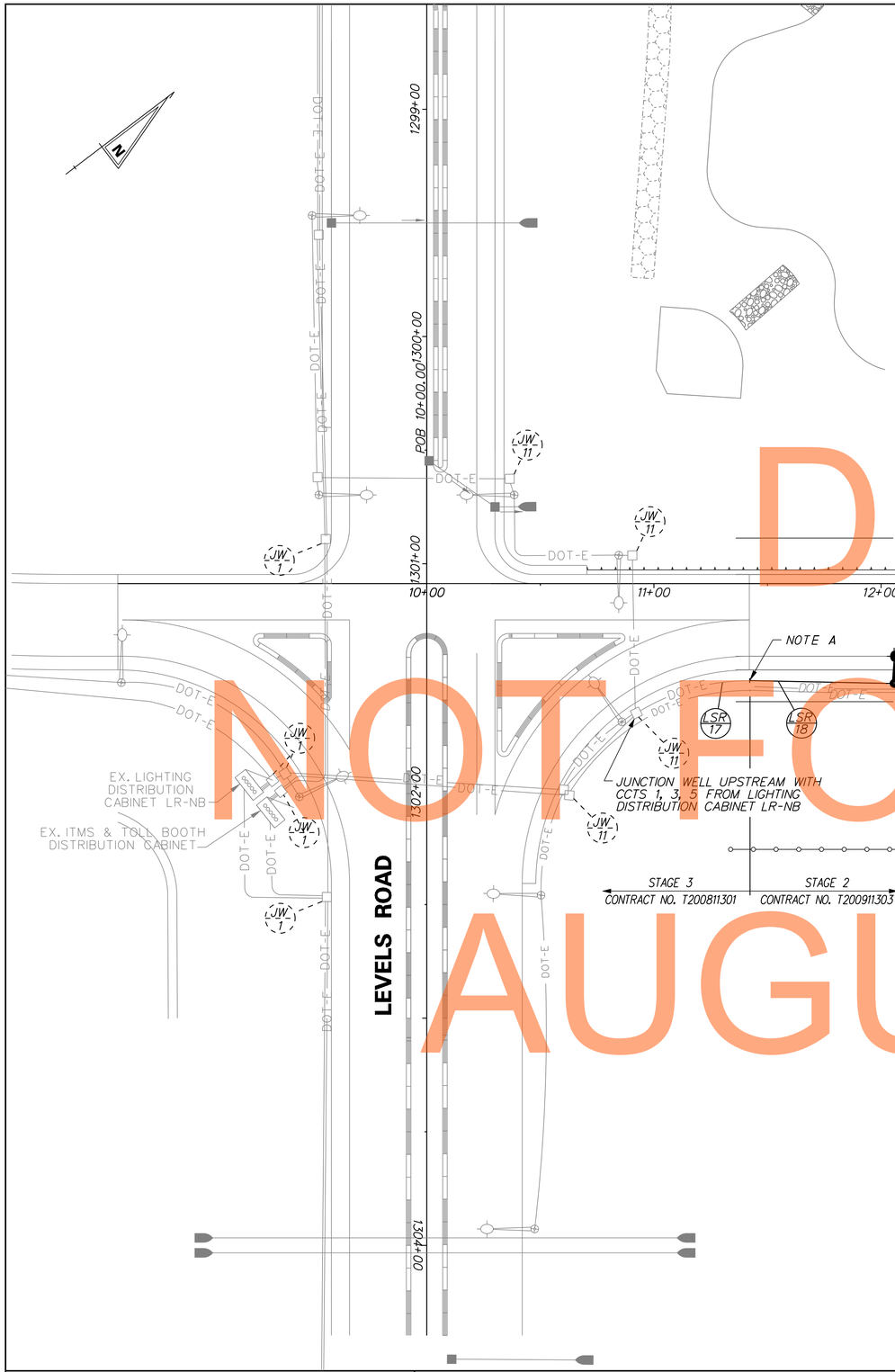
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	A. AGGARWAL
CHECKED BY:	D. L. BAKER

LIGHTING PLAN

	LI-05
SHEET NO.	1004
TOTAL SHTS.	1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-17	LR-NB CCT#1	12+05.75 B/L RAMP C	44.00' RT	30	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-17	53	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	EMPTY CONDUIT PROVIDED UNDER CONTRACT T200811301. 3 PHASE CIRCUIT EXISTS AT JUNCTION WELL
**LSR-18	64	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-NB
LSR-19	200	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-NB
*LSR-20	250	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-NB

* CONTINUED TO DWG. LI-07

** COORDINATE WITH CONTRACT T200811301 FOR EXTENDING THE EXISTING CONDUIT AND SPLICING WITH EXISTING CONDUCTORS AT THE EXISTING UPSTREAM JUNCTION WELL.

NOTE A:

EMPTY 3" DIAMETER PVC CONDUIT FOR RAMP C LIGHTING POLES PROVIDED BY OTHERS. THREE PHASE CIRCUITS 1, 3, 5 WITH 4-#4 AND 1-#4 GROUND IN EXISTING CONDUIT FROM LIGHTING DISTRIBUTION CABINET LR-NB EXISTS COILED UP IN THE JUNCTION WELL UPSTREAM. PROVIDE COUPLING/ADAPTER AT EXISTING CONDUIT END. EXTEND WITH 3" PVC CONDUIT TO POLE LST-17.

PANEL DESIGNATION: LR-NB

TYPE: THREE PHASE 4W
NUMBER OF POLES: 20
GROUND BUS RATING: 100%
MAIN BUS RATING: 100A
MAIN RATING: 50A 3P MCB

LOCATION: LEVELS ROAD WITH RAMP D
VOLTAGE: 277/480 VAC
PANEL MOUNTING: PAD
PANEL ENCLOSURE (NEMA): TYPE 3R
PANEL MIN. A.I.C. RATING: 10KA

CIR. NO.	CIR. BKR.	DESCRIPTION	LOAD/PHASE LOAD	L1	L2	L3	LOAD	DESCRIPTION	CIR. BKR.	CIR. NO.
1	15A	CIRCUIT "A" (RAMP C)	1080	2010			930	CIRCUIT "B" (RAMP D)	15A	2
3			1200		2130		930			4
5			1200			1820	620			6
7	15A	CIRCUIT C (INTERSECTION)	570	2570			2000	2 KVA XFMR	15A	8
9			570		1170		600	PHOTO CONTROL & CONTACTOR	15A	10
11			760			760		SPARE	15A	12
				4580	3300	2580				

TOTAL CONNECTED VA LOAD: 10,460

100% SOLID NEUTRAL BUS
CU EQUIPMENT GROUND BUS

'LR-NB' PANEL SCHEDULE
(PROVIDED UNDER CONTRACT T200811301)

$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

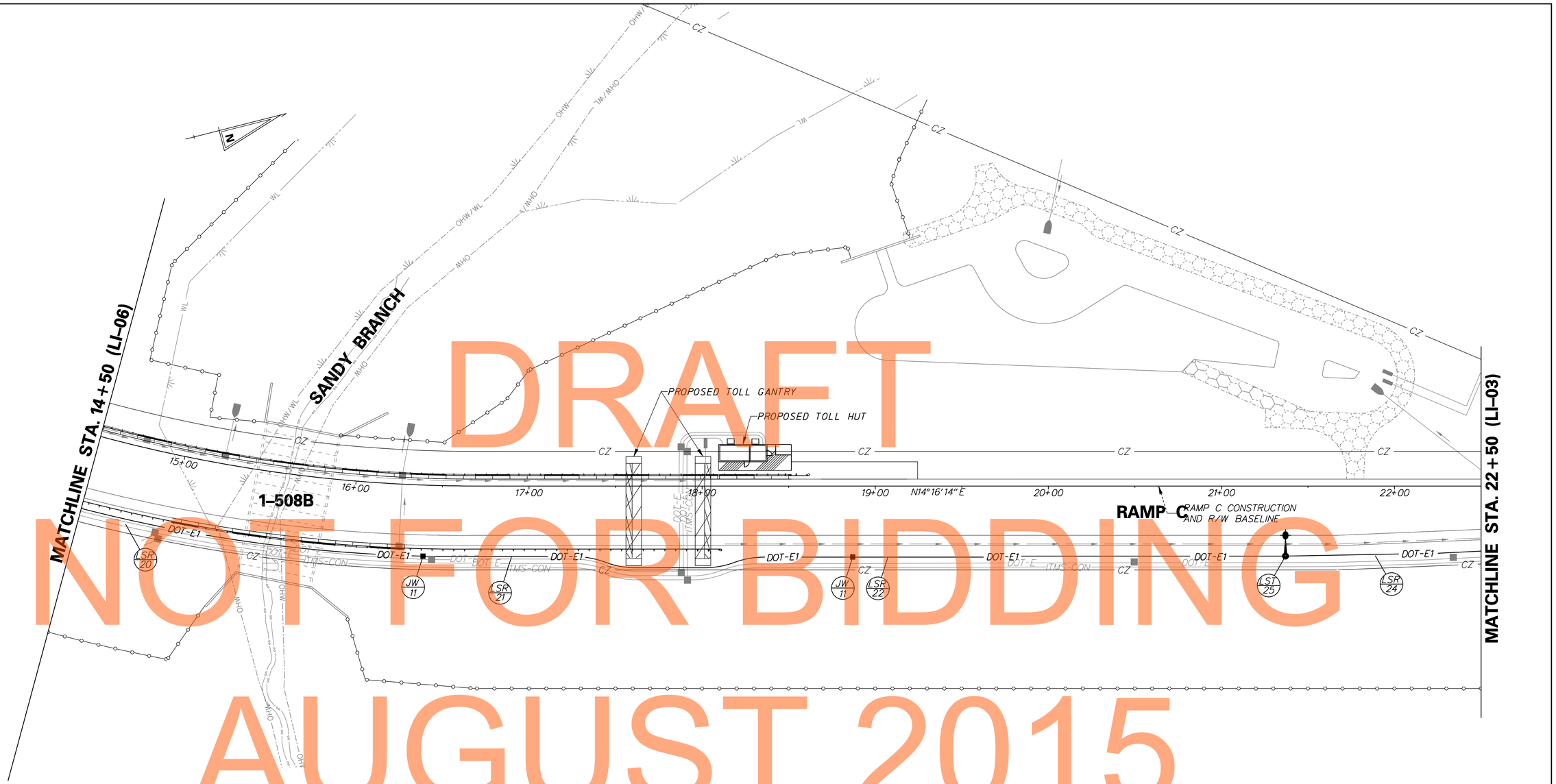
SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: A. AGGARWAL
CHECKED BY: D. L. BAKER

LIGHTING PLAN

LI-06
SHEET NO. 1005
TOTAL SHTS. 1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-25	LR-NB CCT #3	21+37.00 B/L RAMP C	40.50' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-20	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-NB
LSR-21	250	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-22	250	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
**LSR-24	186	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	

* CONTINUED FROM DWG. LI-06, LSR DISTANCE SHOWN ON LI-06
** CONTINUED TO DWG. LI-03

NOTE:

LIGHTING DISTRIBUTION CABINET LR-NB AND 3 PHASE CIRCUITS 1, 3 AND 5 ARE BEING PROVIDED UNDER CONTRACT T200811301.

$FILE$
$DATE$
$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

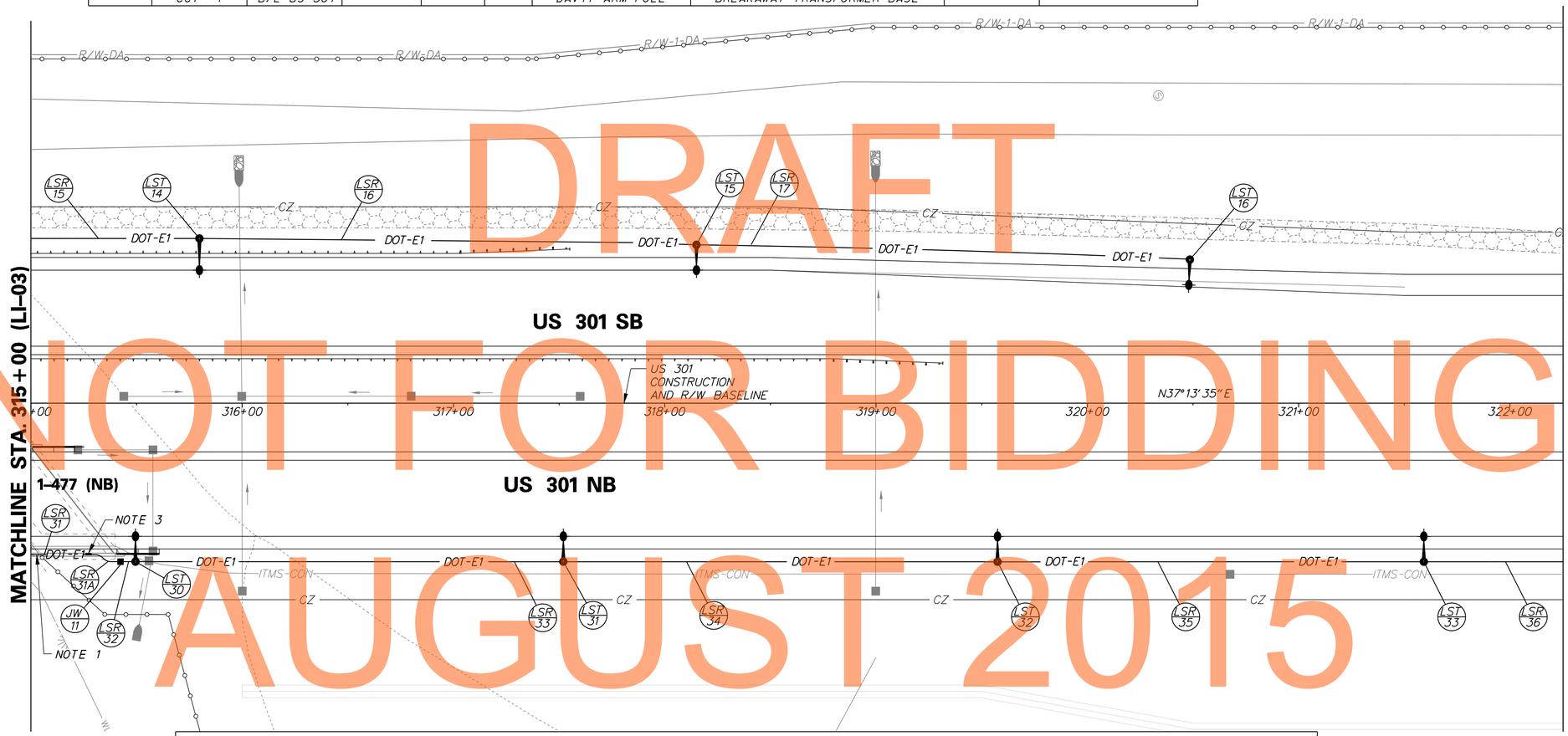
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

LI-07
SHEET NO. 1006
TOTAL SHTS. 1256

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-14	LR-SB CCT #5	315+79.95 B/L US 301	78.00' LT	40	15	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-15	LR-SB CCT #1	318+15.00 B/L US 301	75.00' LT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-16	LR-SB CCT #3	320+48.50 B/L US 301	68.00' LT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-30	LR-NB CCT #1	315+49.50 B/L US 301	78.00' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-31	LR-NB CCT #3	317+52.00 B/L US 301	75.00' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-32	LR-NB CCT #5	319+57.50 B/L US 301	75.00' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-33	LR-NB CCT #1	321+59.25 B/L US 301	75.00' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-15	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-SB
LSR-16	236	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 1, 3)	TRENCH	
LSR-17	234	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 3)	TRENCH	
**LSR-31	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	BRIDGE BARRIER	LTG CCT FROM DISTRIBUTION CABINET LR-NB
LSR-31A	15	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - BRIDGE BARRIER TO JW	
LSR-32	7	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-33	203	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-34	206	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-35	202	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
*LSR-36	223	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 3, 5)	TRENCH	

* CONTINUED TO DWG. LI-09
** CONTINUED FROM DWG. LI-03, LSR DISTANCE SHOWN ON LI-03

NOTES:

1. LIGHTING SERVICE RUN THROUGH BRIDGE BARRIER. REFER TO LI-30 AND BRIDGE 1-477 DRAWINGS FOR CONDUIT AND BARRIER DETAILS. EMPTY CONDUITS WITH PULL STRINGS WILL BE INSTALLED BY STRUCTURE CONTRACTOR.
2. LIGHTING DISTRIBUTION CABINET LR-NB, LR-SB AND 3 PHASE CIRCUIT 1, 3 AND 5 ARE BEING PROVIDED UNDER CONTRACT T200811301.
3. JUNCTION BOX IN BARRIER WILL BE INSTALLED BY STRUCTURE CONTRACTOR. REFER TO LI-30 FOR DETAILS.

$FILE$
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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: A. AGGARWAL	
CHECKED BY: D. L. BAKER	

LIGHTING PLAN

LI-08
SHEET NO. 1007
TOTAL SHTS. 1256

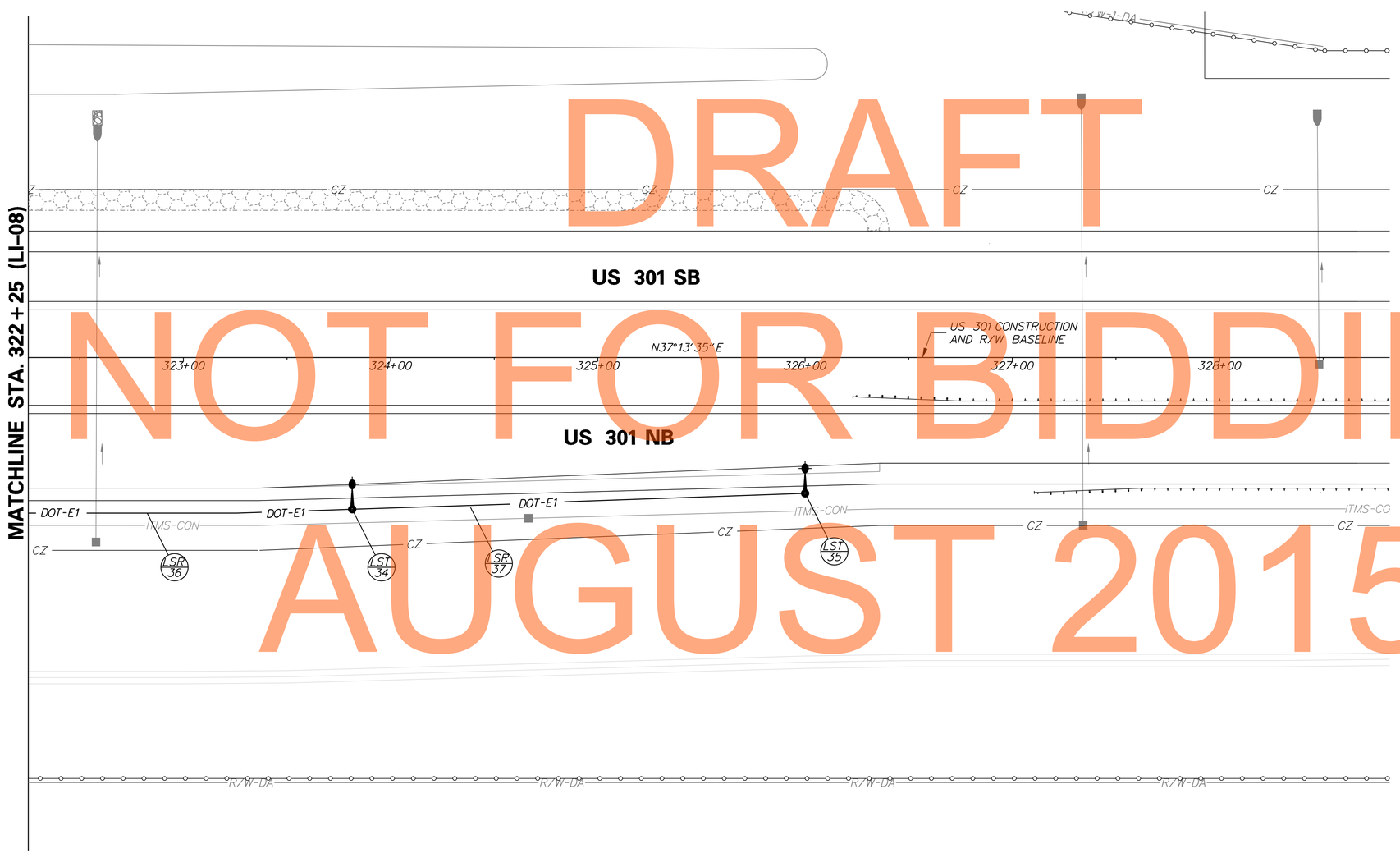
LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-34	LR-NB CCT#3	323+81.50 B/L US 301	73.20' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-35	LR-NB CCT#5	326+00.00 B/L US 301	65.50' RT	40	12	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-36	-	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 3, 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-NB
LSR-37	219	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 5)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LR-NB

* CONTINUED FROM SHEET LI-08, LSR DISTANCE SHOWN ON LI-08



NOTE:

LIGHTING DISTRIBUTION CABINET LC-01 AND 3 PHASE CIRCUITS 1, 3 AND 5 ARE BEING PROVIDED UNDER CONTRACT T200811301.

$FILE$
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$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

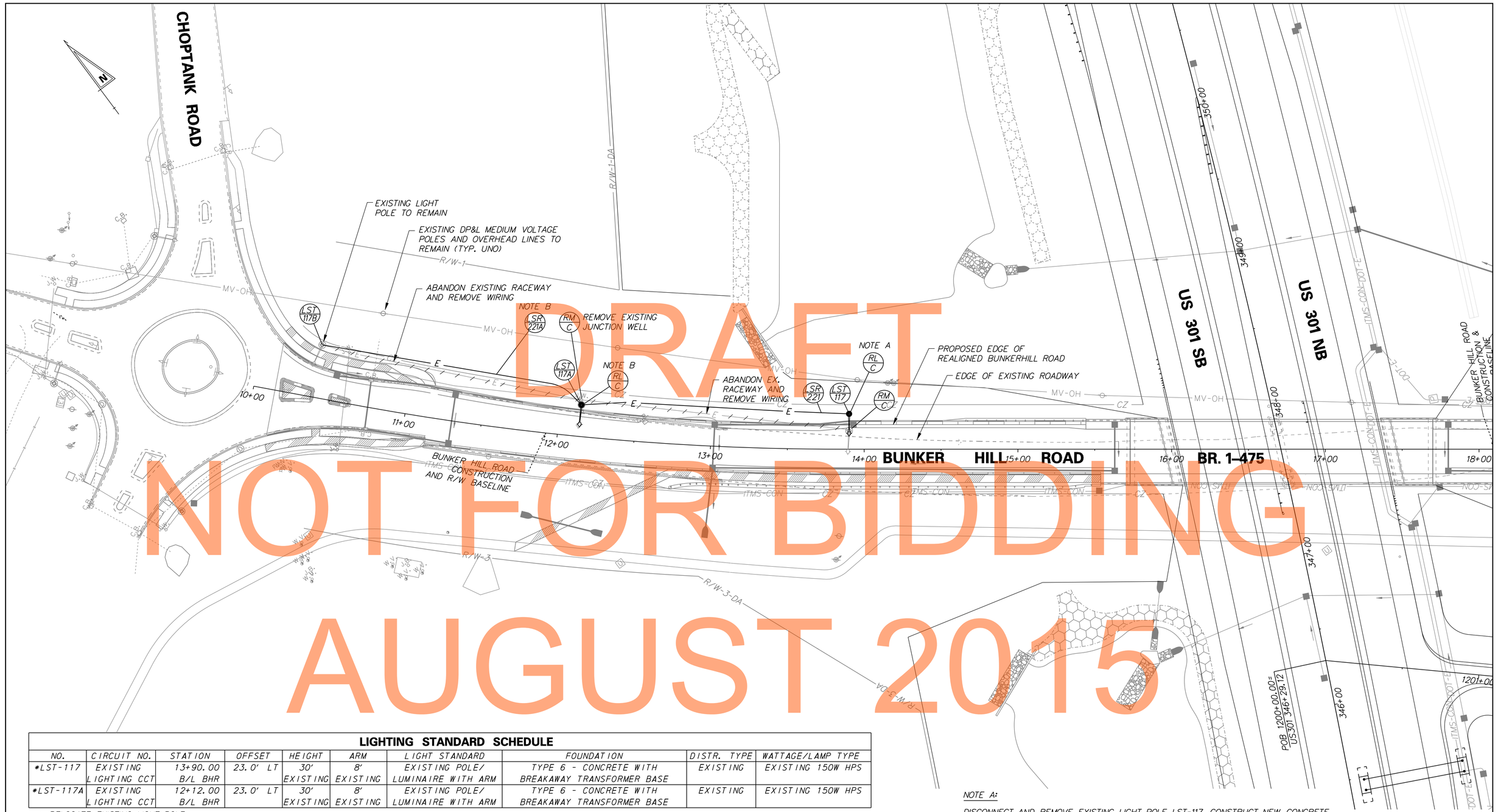
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	A. AGGARWAL
CHECKED BY:	D. L. BAKER

LIGHTING PLAN

	LI-09
SHEET NO.	1008
TOTAL SHTS.	1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
*LST-117	EXISTING LIGHTING CCT	13+90.00 B/L BHR	23.0' LT	30' EXISTING	8' EXISTING	EXISTING POLE/ LUMINAIRE WITH ARM	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	EXISTING	EXISTING 150W HPS
*LST-117A	EXISTING LIGHTING CCT	12+12.00 B/L BHR	23.0' LT	30' EXISTING	8' EXISTING	EXISTING POLE/ LUMINAIRE WITH ARM	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	EXISTING	EXISTING 150W HPS

* RELOCATE EXISTING LIGHT POLE

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-221	175	1	3" PVC	(2)#6, (1)#6 GROUND EXISTING CCT	TRENCH	LTG CCT FROM EXISTING ROUNDABOUT LIGHTING CONTROLLER
**LSR-221A	175	1	3" PVC	(3)#6, (1)#6 GROUND EXISTING CCT	TRENCH	LTG CCT FROM EXISTING ROUNDABOUT LIGHTING CONTROLLER

** RUN SINGLE PHASE CIRCUIT IN NEW DIRECT BURIED CONDUIT TO THE RELOCATED POLE LST-117 AND LST-117A FROM EXISTING JUNCTION WELL AT THE LIGHT POLE UPSTREAM

NOTE A:

DISCONNECT AND REMOVE EXISTING LIGHT POLE LST-117. CONSTRUCT NEW CONCRETE FOUNDATION AND RELOCATE THE POLE AT FIVE FEET FROM THE PROPOSED EDGE OF ROADWAY. RECONNECT THE POLE TO THE SAME CIRCUIT THROUGH NEW WIRES IN NEW CONDUIT.

NOTE B:

DISCONNECT AND REMOVE EXISTING POLE, REMOVE EXISTING JUNCTION WELL. REMOVE WIRES BACK TO EXISTING LIGHT POLE 117B UPSTREAM. CONSTRUCT NEW POLE FOUNDATION AT NEW GRADE AND REINSTALL EXISTING POLE 117A. INSTALL NEW CONDUIT AND WIRES FROM EXISTING LIGHT POLE 117B UPSTREAM. VERIFY EXISTING CONDUIT SIZE AND MATCH NEW CONDUIT TO EXISTING CONDUIT BEING REMOVED IN ORDER TO FACILITATE THE BEND AT POLE LST-117B.

$FILE$
$DATE$
$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

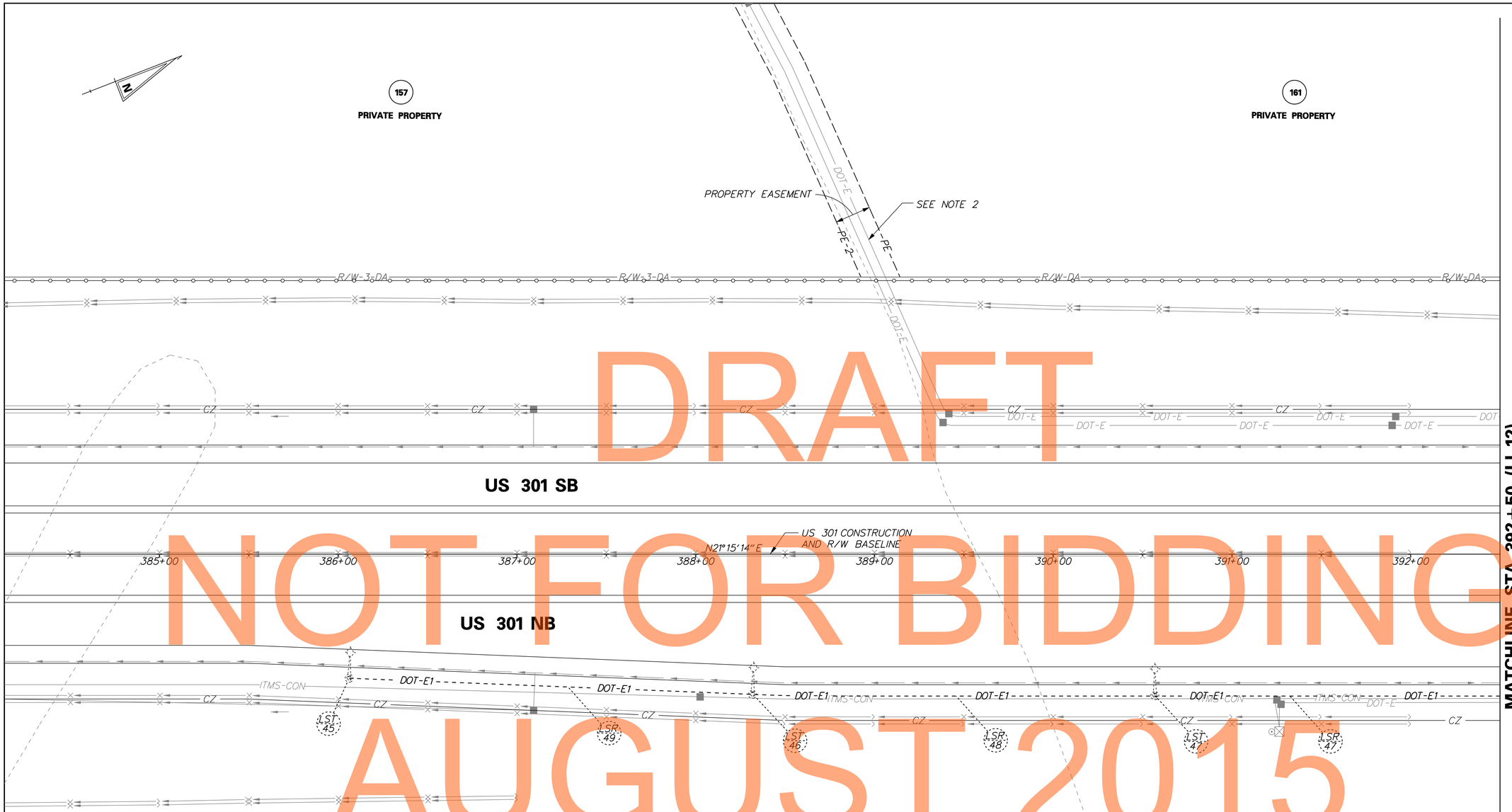
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: A. AGGARWAL
NEW CASTLE	CHECKED BY: D. L. BAKER

LIGHTING PLAN

LI-10
SHEET NO.
1009
TOTAL SHTS.
1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
*LST-45	LC-03 CCT #7	386+06.15 B/L US 301	69.39' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-46	LC-03 CCT #11	388+31.75 B/L US 301	78.41' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-47	LC-03 CCT #9	390+56.87 B/L US 301	79.15' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

* LIGHT POLES WILL BE INSTALLED UNDER CONTRACT T200911307. SHOWN HERE FOR REFERENCE ONLY

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-49	226	1	3" PVC	(2)#6, (1)#6 GROUND CCT (7)	TRENCH	LTG CCT RUNS FROM SPUR RD
**LSR-48	226	1	3" PVC	(3)#6, (1)#6 GROUND CCTS (7, 11)	TRENCH	DISTRIBUTION CABINET LC-03
/*LSR-47	227	1	3" PVC	(4)#6, (1)#6 GROUND CCTS (7, 9, 11)	TRENCH	UNDER CONTRACT T200911307

** LSR CONDUITS SHOWN FOR REFERENCE ONLY. TO BE PROVIDED UNDER CONTRACT T200911307
*** CONTINUED TO DWG. LI-12

NOTES:

1. SPUR ROAD INTERCHANGE LIGHTING WILL BE CONSTRUCTED IN CONTRACT T200911307. POWER SERVICE DROPS AND THE CONDUITS UNDER US 301 PAVEMENT WILL BE IN THIS CONTRACT.
2. REFER TO SIGNING, STRIPING AND CONDUIT PLANS FOR DETAILS OF SERVICE POWER DROPS FROM DP&L POWER POLE AT CHOPTANK ROAD. THIS WILL INCLUDE METERING AT CHOPTANK ROAD NEW DP&L POLE AND LIGHTING CONTROL CABINET AT B/L US 301 STA. 399+90± LT.
3. LIGHTING SERVICE AND LIGHTING STANDARD SCHEDULES ARE FOR INFORMATION ONLY.

$FILES
$DATES
$USERS

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

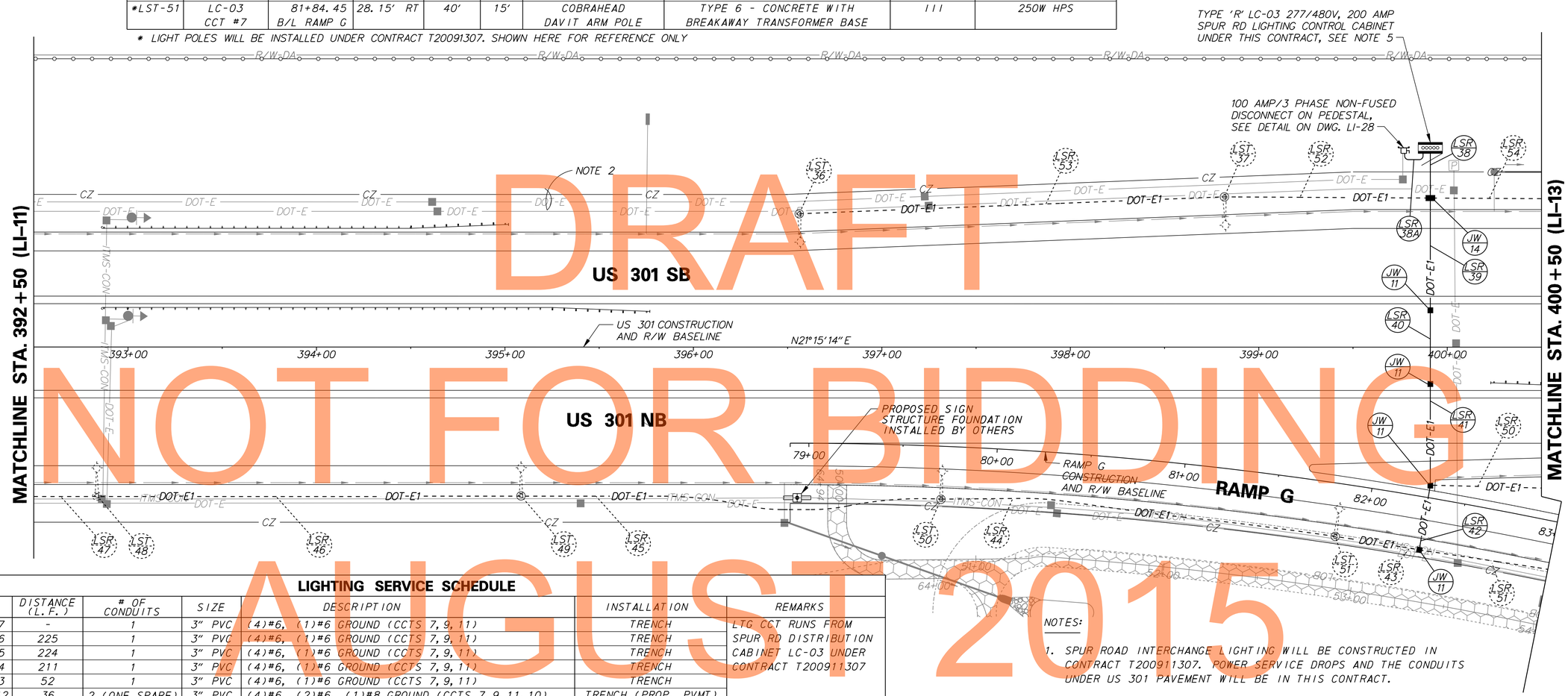
LIGHTING PLAN

LI-11
SHEET NO.
1010
TOTAL SHTS.
1256

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
*LST-36	LC-03 CCT #3	396+56.15 B/L US 301	70.75' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-37	LC-03 CCT #1	398+81.15 B/L US 301	79.75' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-48	LC-03 CCT #7	392+83.45 B/L US 301	79.15' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-49	LC-03 CCT #11	395+08.52 B/L US 301	79.15' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-50	LC-03 CCT #9	79+71.27 B/L RAMP G	28.15' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-51	LC-03 CCT #7	81+84.45 B/L RAMP G	28.15' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

* LIGHT POLES WILL BE INSTALLED UNDER CONTRACT T20091307. SHOWN HERE FOR REFERENCE ONLY



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*/**LSR-47	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	LTG CCT RUNS FROM SPUR RD DISTRIBUTION CABINET LC-03 UNDER CONTRACT T200911307
*LSR-46	225	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
*LSR-45	224	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
*LSR-44	211	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
*LSR-43	52	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
****LSR-42	36	2 (ONE SPARE)	3" PVC	(4)#6, (2)#6, (1)#8 GROUND (CCTS 7, 9, 11, 10)	TRENCH (PROP. PVMT)	
****LSR-41	54	2 (ONE SPARE)	3" PVC	(4)#6, (3)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10)	TRENCH (PROP. PVMT)	
****LSR-40	39	1	3" PVC	(4)#6, (3)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10)	TRENCH	
****LSR-39	60	2 (ONE SPARE)	3" PVC	(4)#6, (3)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10)	TRENCH (PROP. PVMT)	
****LSR-38	25	4 (TWO SPARE)	4" PVC	(4)#6, (3)#6, (1)#6 GROUND (CCTS 1, 3, 2, 4, 6) IN 4" CONDUIT, (4)#6, (3)#6, (1)#8 GROUND (CCTS 7, 9, 11, 8, 10) IN 4" C,	TRENCH	
LSR-38A	5	1	2½" PVC	(4)#1/0, (1)#6 GROUND	TRENCH	BET. DISC. SW & LC-03
*/***LSR-50	93	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 8)	TRENCH	LTG CCT RUNS FROM SPUR RD DISTRIBUTION CABINET LC-03 UNDER CONTRACT T200911307
*/***LSR-51	162	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 10)	TRENCH	
*LSR-52	116	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 1, 3)	TRENCH	
*LSR-53	225	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 3)	TRENCH	
*/***LSR-54	109	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	

* LSR CONDUITS SHOWN FOR REFERENCE ONLY. CONDUIT AND WIRING TO BE PROVIDED UNDER CONTRACT T200911307
** CONTINUED FROM DWG. LI-11, LSR DISTANCE SHOWN ON LI-11
*** CONTINUED TO DWG. LI-13
**** EMPTY CONDUITS AND JUNCTION WELLS TO BE INSTALLED UNDER THIS CONTRACT, WIRING TO BE INSTALLED UNDER T200911207

NOTES:

1. SPUR ROAD INTERCHANGE LIGHTING WILL BE CONSTRUCTED IN CONTRACT T200911307. POWER SERVICE DROPS AND THE CONDUITS UNDER US 301 PAVEMENT WILL BE IN THIS CONTRACT.
2. REFER TO SIGNING, STRIPING AND CONDIUT PLANS FOR DETAILS OF SERVICE POWER DROPS FROM DP&L POWER POLE AT CHOPTANK ROAD. THIS WILL INCLUDE METERING AT CHOPTANK ROAD NEW DP&L POLE AND SERVICE RUN TO LIGHTING CONTROL CABINET LC-03 AT B/L US 301 STA. 399+90± LT.
3. INSTALL LIGHT CONTROL DISTRIBUTION CABINET 30 FEET AWAY FROM THE EDGE OF SHOULDER PAVEMENT EDGE OUTSIDE OF CLEAR ZONE.
4. LIGHTING SERVICE AND LIGHTING STANDARD SCHEDULES ARE FOR INFORMATION ONLY. SEE **** UNDER LIGHTING SERVICE SCHEDULE FOR EMPTY CONDUITS AND JUNCTION WELLS UNDER THIS CONTRACT. WIRING TO BE PROVIDED UNDER CONTRACT T200911207.
5. COORDINATE WITH DELMARVA POWER (DP&L) FOR 3 PHASE 480/277V SERVICE FROM CHOPTANK ROAD.

$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

SCALE
0 30 60 90
FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: A. AGGARWAL
NEW CASTLE	CHECKED BY: D. L. BAKER

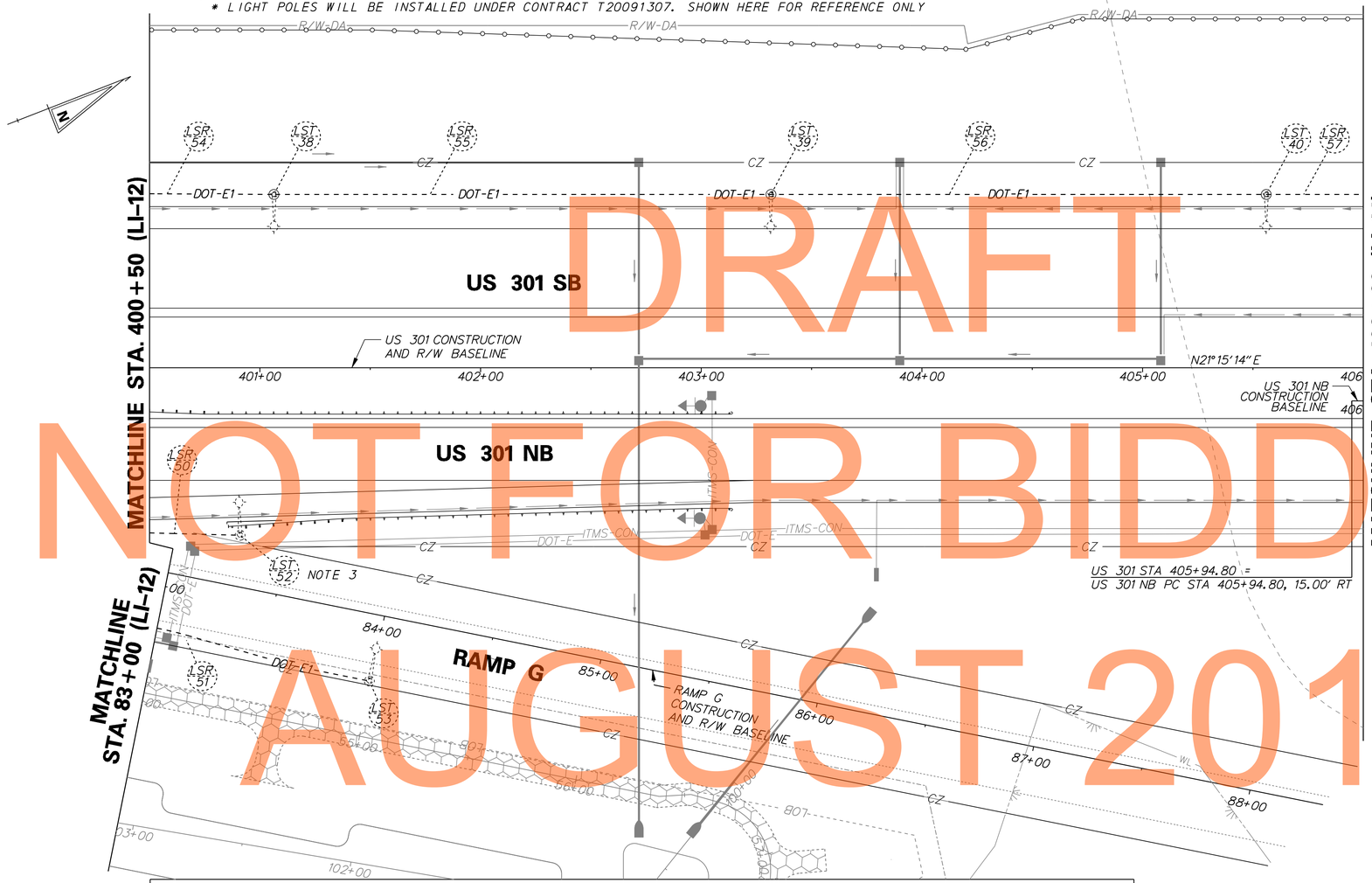
LIGHTING PLAN

LI-12
SHEET NO. 1011
TOTAL SHTS. 1256

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
*LST-38	LC-03 CCT #2	401+06.94 B/L US 301	78.50' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-39	LC-03 CCT #4	403+31.61 B/L US 301	78.50' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-40	LC-03 CCT #6	405+56.10 B/L US 301	78.50' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-52	LC-03 CCT #8	83+28.00 B/L RAMP G	23.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-53	LC-03 CCT #10	83+99.08 B/L RAMP G	30.17' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

* LIGHT POLES WILL BE INSTALLED UNDER CONTRACT T200911307. SHOWN HERE FOR REFERENCE ONLY



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*/***LSR-50	-	1	3" PVC	(2)#6, (1) #6 GROUND (CCT 8)	TRENCH	LTG CCT RUNS FROM SPUR RD DISTRIBUTION CABINET LC-03 UNDER CONTRACT T200911307
*/***LSR-51	-	1	3" PVC	(2)#6, (1) #6 GROUND (CCT 10)	TRENCH	
*/***LSR-54	-	1	3" PVC	(4)#6, (1) #6 GROUND (CCTS 2, 4, 6)	TRENCH	
*LSR-55	225	1	3" PVC	(4)#6, (1) #6 GROUND (CCTS 2, 4, 6)	TRENCH	
*LSR-56	225	1	3" PVC	(4)#6, (1) #6 GROUND (CCTS 2, 4, 6)	TRENCH	
*/**LSR-57	225	1	3" PVC	(4)#6, (1) #6 GROUND (CCTS 2, 4, 6)	TRENCH	

* LSR CONDUITS SHOWN FOR REFERENCE ONLY. TO BE PROVIDED UNDER CONTRACT T200911307
** CONTINUED TO DWG. LI-14
*** CONTINUED FROM DWG. LI-12, LSR DISTANCE SHOWN ON LI-12

NOTES:

1. SPUR ROAD INTERCHANGE LIGHTING WILL BE CONSTRUCTED IN CONTRACT T200911307. POWER SERVICE DROPS AND THE CONDUITS UNDER US 301 PAVEMENT WILL BE IN THIS CONTRACT.
2. LIGHTING SERVICE AND LIGHTING STANDARD SCHEDULES ARE FOR INFORMATION ONLY.
3. COORDINATE WITH GUARD RAIL CONTRACTOR FOR POST SPACING TO BE 3'-1½" C/C.

$FILE$
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$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

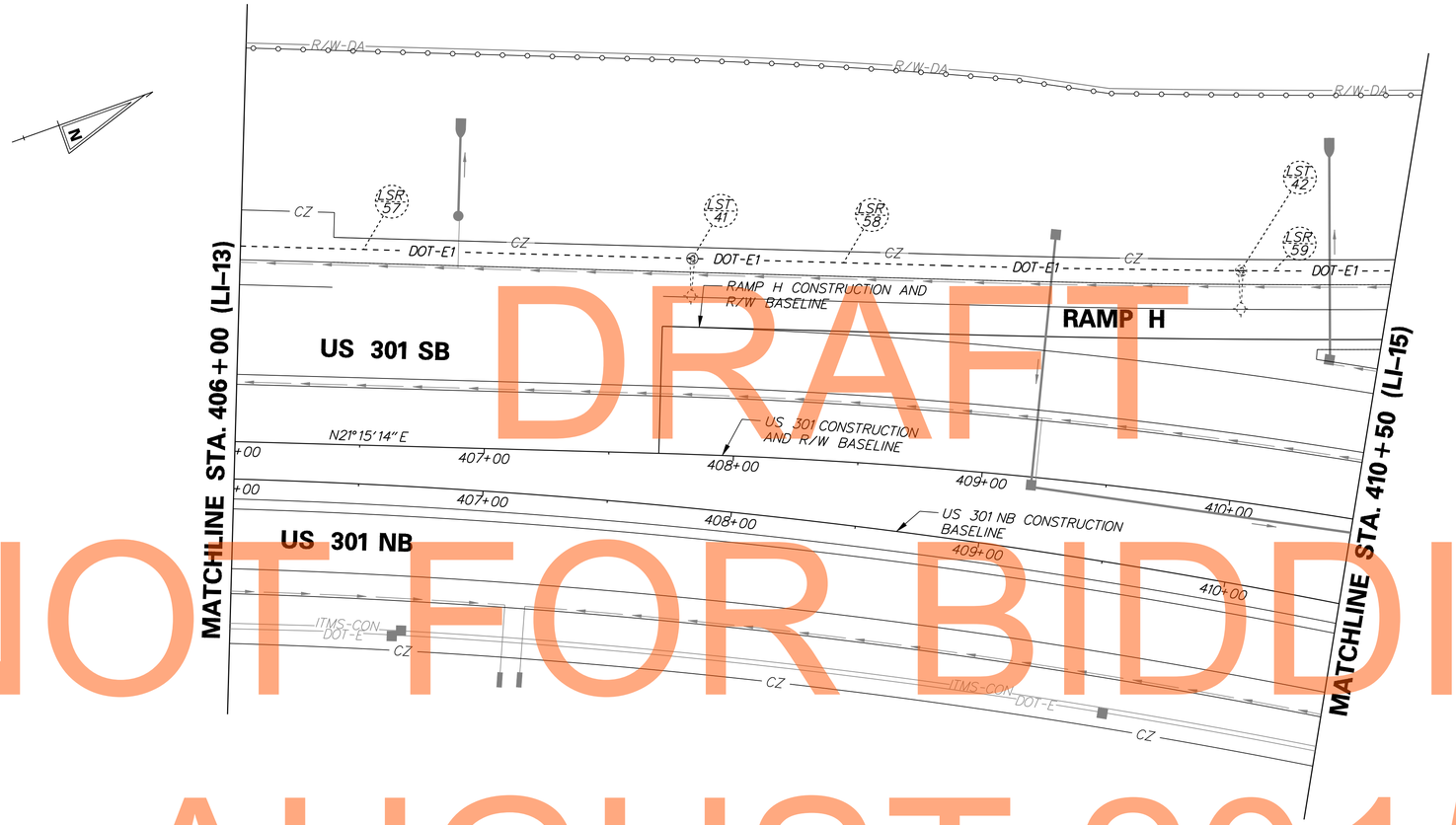
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

LI-13
SHEET NO.
1012
TOTAL SHTS.
1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
*LST-41	LC-03 CCT #2	69+16.45 B/L RAMP H	27.50' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
*LST-42	LC-03 CCT #4	66+95.68 B/L RAMP H	27.50' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

* LIGHT POLES WILL BE INSTALLED UNDER CONTRACT T200091307. SHOWN HERE FOR REFERENCE ONLY

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*/**LSR-57	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	LTG CCT RUNS FROM SPUR RD
*LSR-58	221	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	DISTRIBUTION CABINET LC-03
*/***LSR-59	128	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 2, 6)	TRENCH	UNDER CONTRACT T200911307

* LSR CONDUITS SHOWN FOR REFERENCE ONLY. TO BE PROVIDED UNDER CONTRACT T200911307
** CONTINUED FROM DWG. LI-13, LSR DISTANCE SHOWN ON LI-13
*** CONTINUED TO DWG. LI-15

NOTES:

1. SPUR ROAD INTERCHANGE LIGHTING WILL BE CONSTRUCTED IN CONTRACT T200911307. POWER SERVICE DROPS AND THE CONDUITS UNDER US 301 PAVEMENT WILL BE IN THIS CONTRACT.
2. LIGHTING SERVICE AND LIGHTING STANDARD SCHEDULES ARE FOR INFORMATION ONLY.

$FILE$
$DATE$
$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

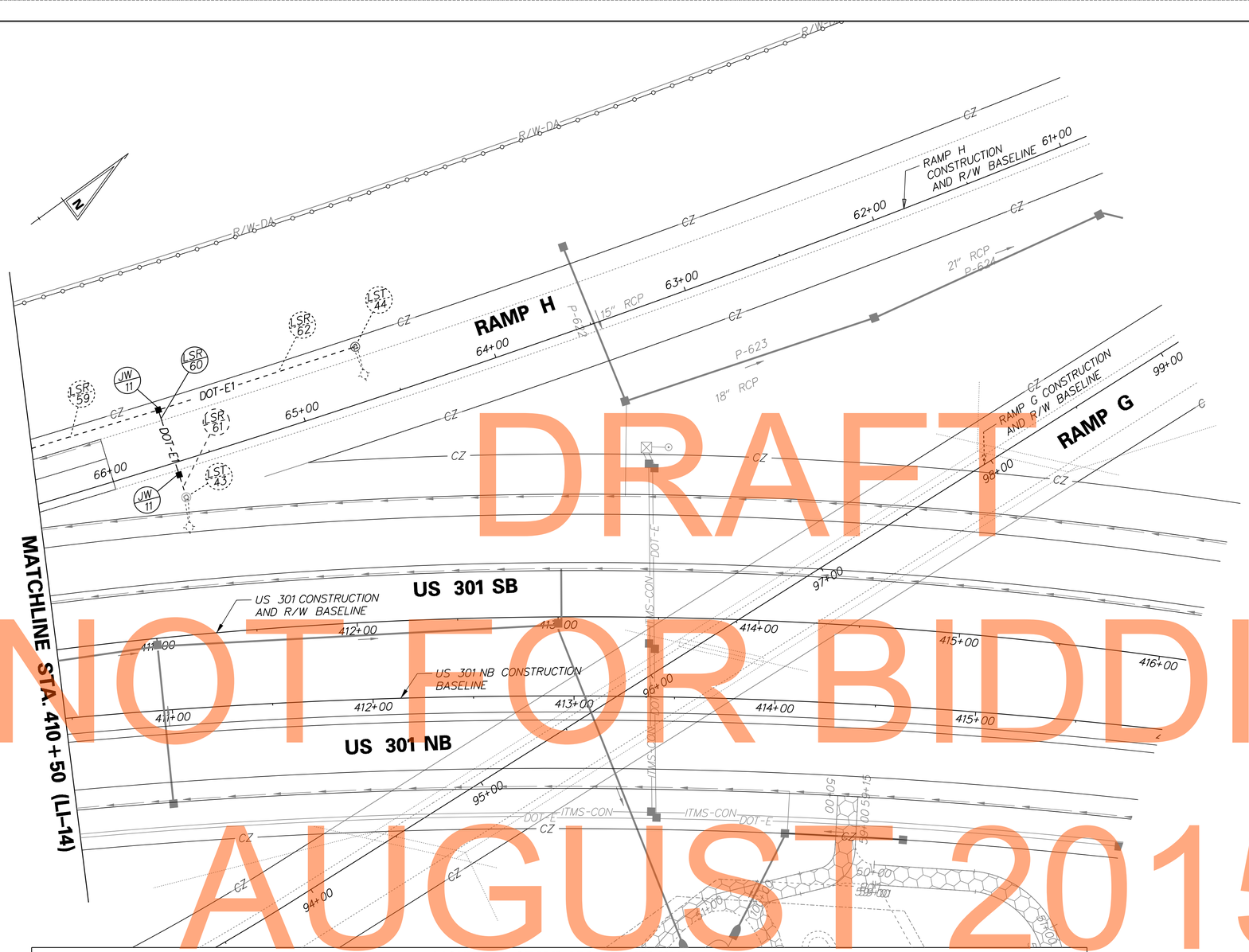
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

LI-14	
SHEET NO.	1013
TOTAL SHTS.	1256



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-43	LC-03 CCT #6	65+67.85 B/L RAMP H	18.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-44	LC-03 CCT #2	64+64.78 B/L RAMP H	27.50' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

* LIGHT POLES WILL BE INSTALLED UNDER CONTRACT T200911307. SHOWN HERE FOR REFERENCE ONLY

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*/***LSR-59	-	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 2, 6)	TRENCH	LTG CCT RUNS FROM SPUR RD DISTRIBUTION CABINET LC-03 UNDER CONTRACT T200911307
**LSR-60	34	2(ONE SPARE)	3" PVC	(2)#6, (1)#6 GROUND (CCT 6)	TRENCH (PROP. PVMT)	
*LSR-61	12	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 6)	TRENCH	
*LSR-62	103	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 2)	TRENCH	

* LSR CONDUITS SHOWN FOR REFERENCE ONLY. CONDUIT AND WIRING TO BE PROVIDED UNDER CONTRACT T200911307
** EMPTY CONDUIT AND JUNCTION WELL TO BE INSTALLED UNDER THIS CONTRACT, WIRES TO BE INSTALLED UNDER CONTRACT T200911307
*** CONTINUED FROM DWG. LI-14, LSR DISTANCE SHOWN ON LI-14

NOTES:

1. SPUR ROAD INTERCHANGE LIGHTING WILL BE CONSTRUCTED IN CONTRACT T200911307. POWER SERVICE DROPS AND THE CONDUITS UNDER US 301 PAVEMENT WILL BE IN THIS CONTRACT.
2. LIGHTING SERVICE AND LIGHTING STANDARD SCHEDULES ARE FOR INFORMATION ONLY.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

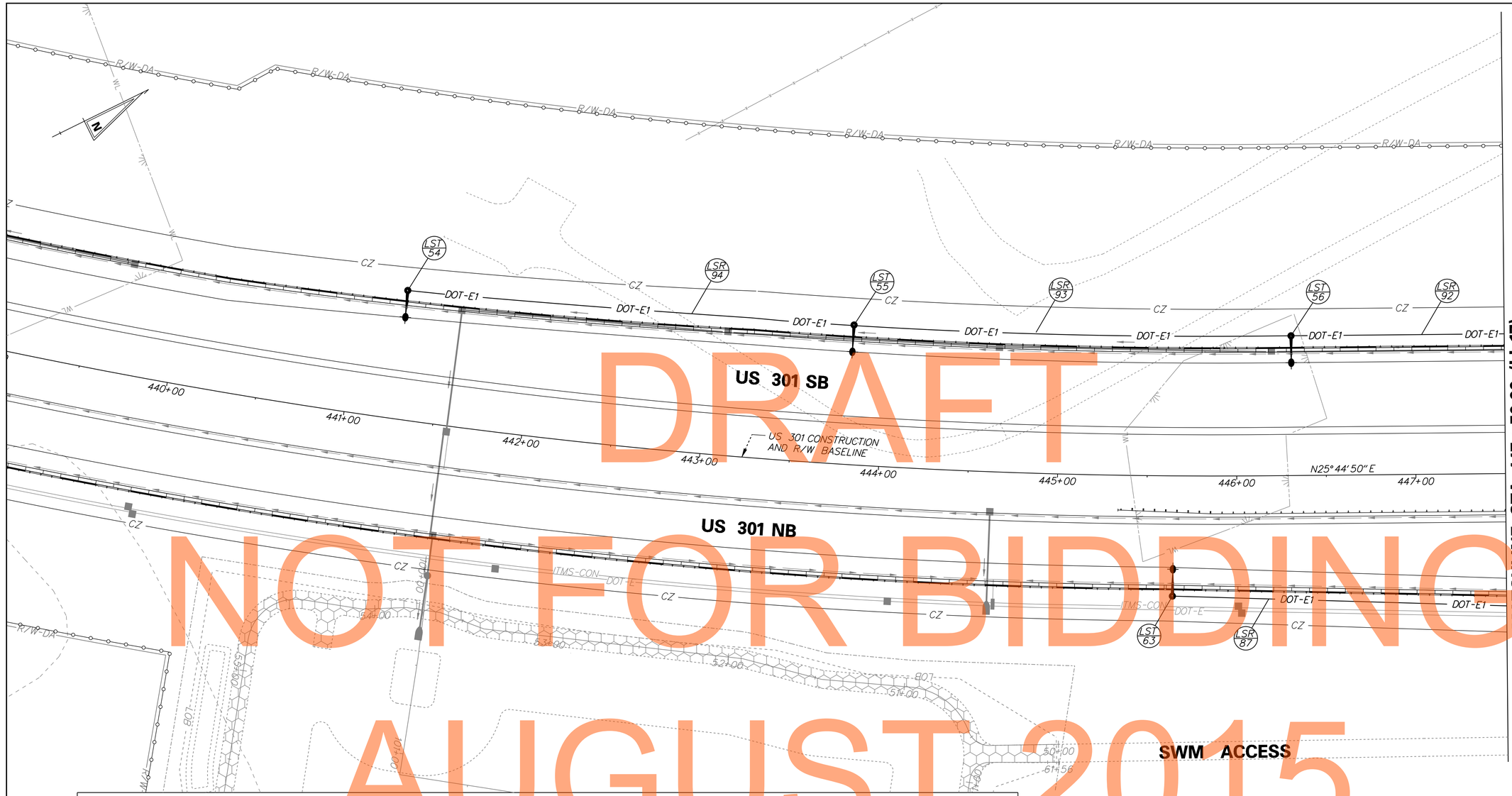
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: A. AGGARWAL	
CHECKED BY: D. L. BAKER	

LIGHTING PLAN

	LI-15
SHEET NO.	1014
TOTAL SHTS.	1256



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
LSR-94	250	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 2)	TRENCH	LTG CCT FROM DISTRIBUTION CABINET LC-04
LSR-93	244	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 2, 6)	TRENCH	
*LSR-92	244	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	
*LSR-87	200	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 5)	TRENCH	

* CONTINUED TO DWG. LI-17

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-54	LC-04 CCT #2	441+25.80 B/L US 301	72.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-55	LC-04 CCT #6	443+81.42 B/L US 301	78.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-56	LC-04 CCT #4	446+31.00 B/L US 301	78.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-63	LC-04 CCT #5	445+64.50 B/L US 301	67.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

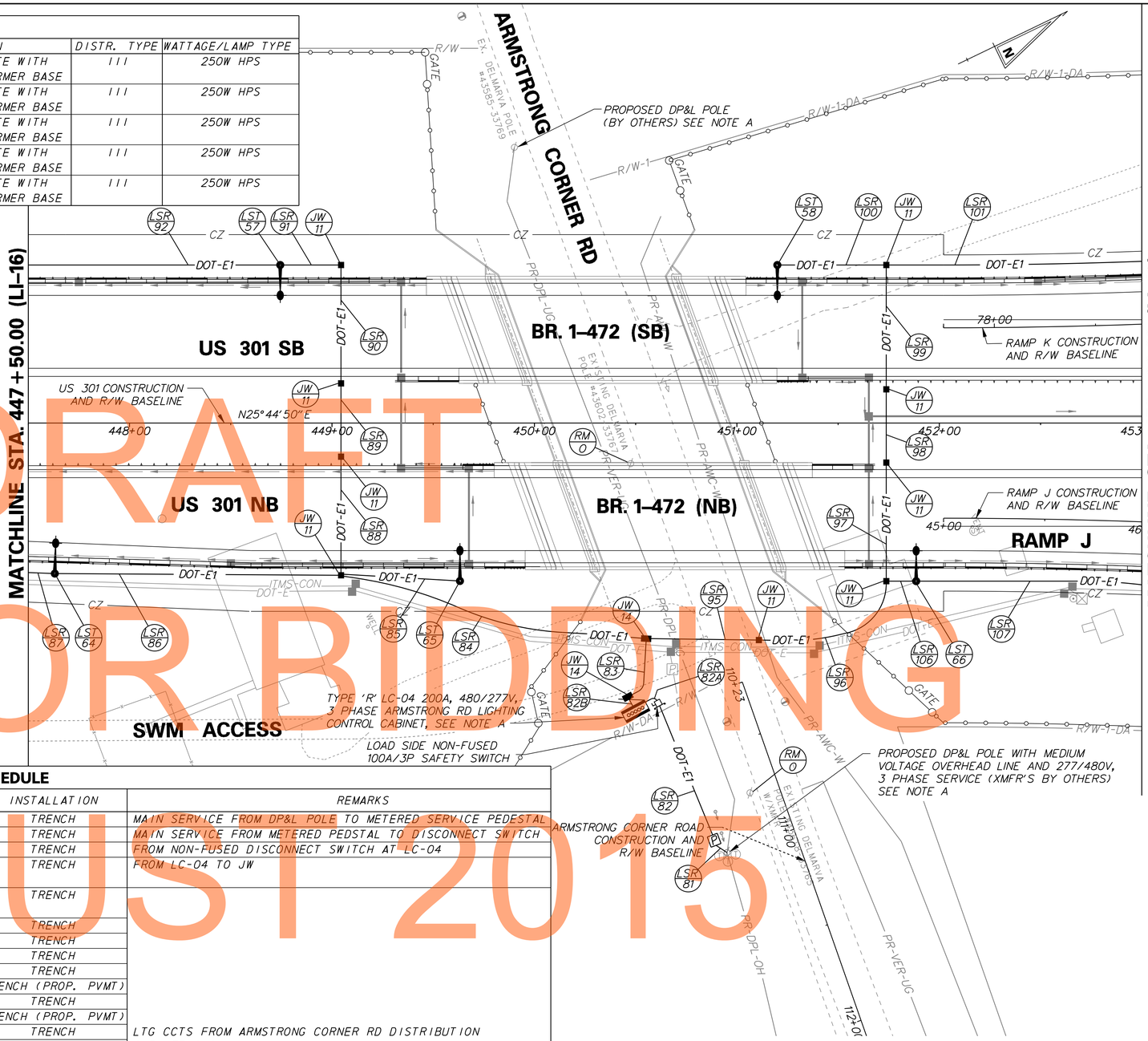
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY		
NEW CASTLE	CHECKED BY: D. L. BAKER	

LIGHTING PLAN

	LI-16
SHEET NO.	1015
TOTAL SHTS.	1256

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-57	LC-04 CCT #2	448+74.45 B/L US 301	77.50' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-58	LC-04 CCT #8	451+20.00 B/L US 301	77.50' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-64	LC-04 CCT #3	447+63.05 B/L US 301	75.46' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-65	LC-04 CCT #1	449+63.21 B/L US 301	77.75' RT	40''	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-66	LC-04 CCT #7	451+88.57 B/L US 301	77.55' RT	40	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
LSR-81	40	1	2" RGS	(4)#1/0,	TRENCH	MAIN SERVICE FROM DP&L POLE TO METERED SERVICE PEDESTAL
LSR-82	80	1	2½" PVC	(4)#1/0, (1)#6 GROUND	TRENCH	MAIN SERVICE FROM METERED PEDSTAL TO DISCONNECT SWITCH
LSR-82A	10	1	2½" PVC	(4)#1/0, (1)#6 GROUND	TRENCH	FROM NON-FUSED DISCONNECT SWITCH AT LC-04
LSR-82B	10	4 (TWO SPARE)	4" PVC	(8)#6, (1)#6 GROUND (CCTS 1, 3, 5, 2, 4, 6) IN 4" C, (8)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10, 12) IN 4" C	TRENCH	FROM LC-04 TO JW
LSR-83	43	2	3" PVC	(8)#6, (1)#6 GROUND (CCTS 1, 3, 5, 2, 4, 6) IN 3" C , (8)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10, 12) IN 3" C	TRENCH	
LSR-84	160	1	3" PVC	(8)#6, (1)#6 GROUND (CCTS 1, 3, 5, 2, 4, 6)	TRENCH	
LSR-85	59	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 1)	TRENCH	
LSR-86	140	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 3, 5)	TRENCH	
*LSR-87	-	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 5)	TRENCH	
LSR-88	61	2 (ONE SPARE)	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH (PROP. PVMT)	
LSR-89	36	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	
LSR-90	59	2 (ONE SPARE)	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH (PROP. PVMT)	
LSR-91	30	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	LTG CCTS FROM ARMSTRONG CORNER RD DISTRIBUTION CABINET C-04
*LSR-92	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 2, 4, 6)	TRENCH	
LSR-95	50	2 (ONE SPARE)	3" PVC	(8)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10, 12)	TRENCH-OPEN CUT/ COVER EXISTING ROAD	
LSR-96	80	1	3" PVC	(8)#6, (1)#6 GROUND (CCTS 7, 9, 11, 8, 10, 12)	TRENCH	
LSR-97	61	2 (ONE SPARE)	3" PVC	(4)#6, (1)#6 GROUND (CCTS 8, 10, 12)	TRENCH (PROP. PVMT)	
LSR-98	36	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 8, 10, 12)	TRENCH	
LSR-99	59	2 (ONE SPARE)	3" PVC	(4)#6, (1)#6 GROUND (CCTS 8, 10, 12)	TRENCH (PROP. PVMT)	
LSR-100	54	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 8)	TRENCH	
**LSR-101	164	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 8, 10, 12)	TRENCH	
LSR-106	15	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
**LSR-107	221	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	

* CONTINUED FROM DWG. LI-16, LSR DISTANCE SHOWN ON LI-18 ** CONTINUED TO DWG. LI-18

NOTE A:

COORDINATE WITH DELMARVA POWER (DP&L) FOR 3 PHASE 277/480V SERVICE FROM THEIR NEW POLE/TRANSFORMER BANK. DP&L 3 PHASE 25kv UNDERGROUND (BY OTHERS).

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$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: A. AGGARWAL	
CHECKED BY: D. L. BAKER	

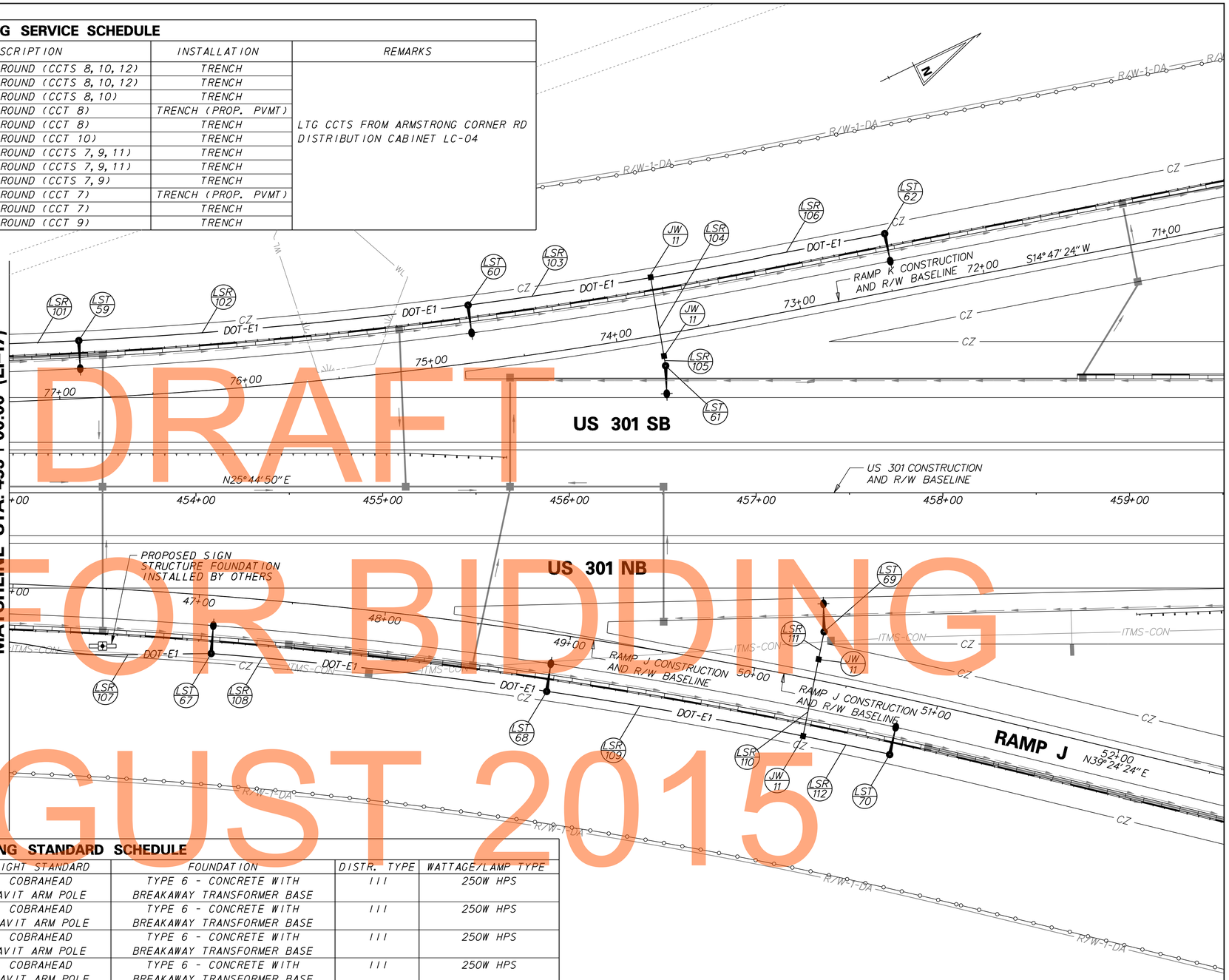
LIGHTING PLAN

LI-17
SHEET NO. 1016
TOTAL SHTS. 1256

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-101	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 8, 10, 12)	TRENCH	LTG CCTS FROM ARMSTRONG CORNER RD DISTRIBUTION CABINET LC-04
LSR-102	210	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 8, 10, 12)	TRENCH	
LSR-103	99	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 8, 10)	TRENCH	
LSR-104	43	2 (ONE SPARE)	3" PVC	(2)#6, (1)#6 GROUND (CCT 8)	TRENCH (PROP. PVMT)	
LSR-105	5	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 8)	TRENCH	
LSR-106	128	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 10)	TRENCH	
*LSR-107	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
LSR-108	181	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 7, 9, 11)	TRENCH	
LSR-109	140	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 7, 9)	TRENCH	
LSR-110	42	2 (ONE SPARE)	3" PVC	(2)#6, (1)#6 GROUND (CCT 7)	TRENCH (PROP. PVMT)	
LSR-111	15	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 7)	TRENCH	
LSR-112	48	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 9)	TRENCH	

* CONTINUED FROM DWG. LI-17, LSR DISTANCE SHOWN ON LI-17



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-59	LC-04 CCT #10	76+88.17 B/L RAMP K	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-60	LC-04 CCT #12	74+76.40 B/L RAMP K	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-61	LC-04 CCT #8	73+76.36 B/L RAMP K	16.85' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-62	LC-04 CCT #10	72+48.14 B/L RAMP K	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-67	LC-04 CCT #9	47+08.68 B/L RAMP J	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-68	LC-04 CCT #11	48+91.68 B/L RAMP J	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-69	LC-04 CCT #7	50+32.67 B/L RAMP J	26.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-70	LC-04 CCT #9	50+80.66 B/L RAMP J	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

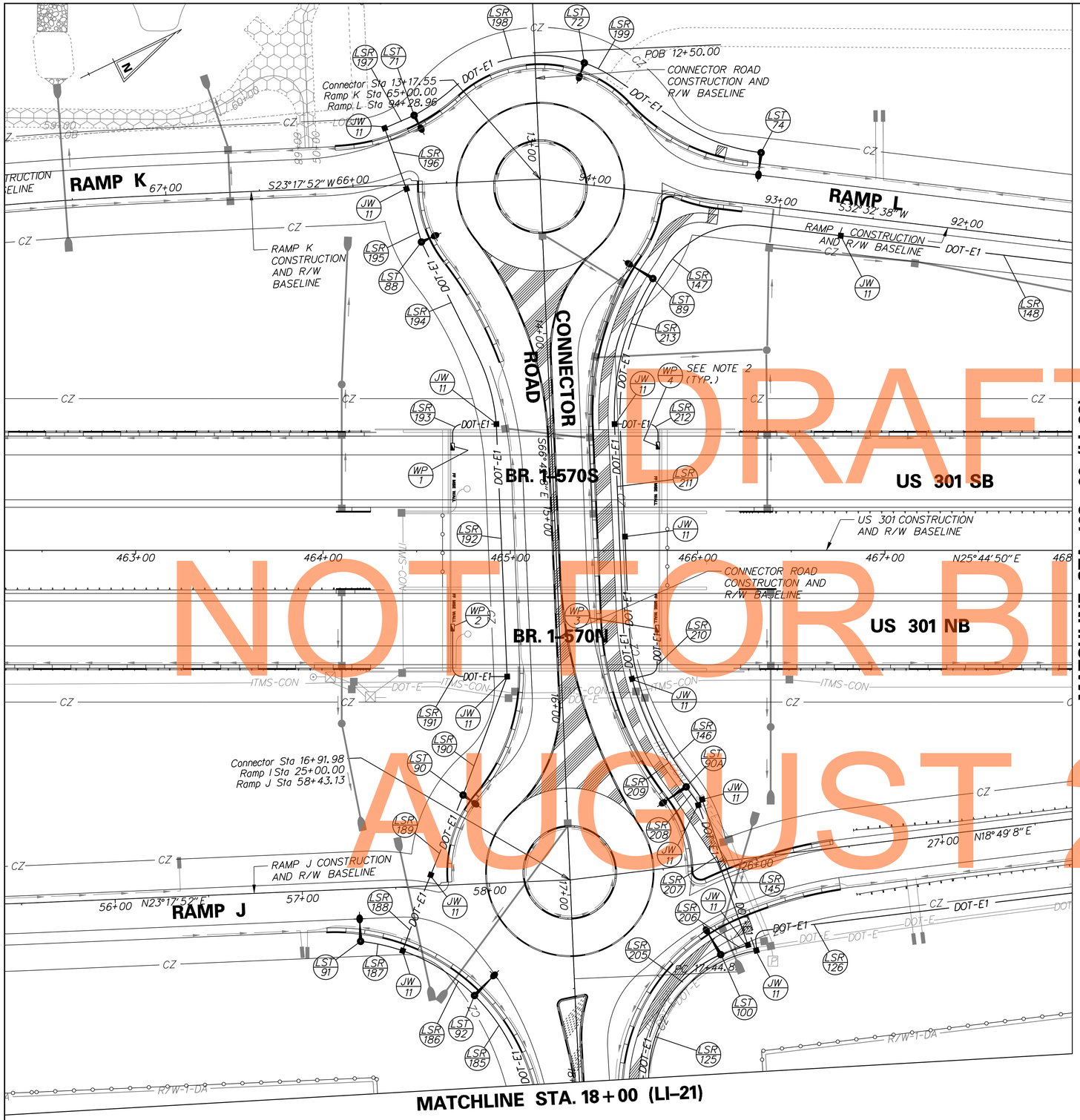
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: A. AGGARWAL
NEW CASTLE	CHECKED BY: D. L. BAKER

LIGHTING PLAN

LI-18	
SHEET NO.	1017
TOTAL SHTS.	1256



CROSS REFERENCE NOTES:

1. REFER TO DWG. LI-20 FOR LIGHTING STANDARD AND LIGHTING SERVICE SCHEDULES.
2. FOR 'WP' - WALL PACK LIGHT FIXTURES, REFER TO DETAIL ON DWG. LI-27.

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$FILES

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

LI-19
SHEET NO.
1018
TOTAL SHTS.
1256

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-125	-	1	3" PVC	(4)#4, (4)#4,(1)#4 GROUND, CCTS (1, 3, 5, 2, 4, 6)	TRENCH	LTG CCTS FROM 277/480V LTG DISTRIBUTION CABINET LC-05 (N-W CORNER)
**LSR-126	244	1	3" PVC	(4)#4, (1)#4 GROUND, (CCTS 1, 3, 5)	TRENCH	
LSR-145	86	2 (ONE SPARE)	3" PVC	(4)#4, (1)#4 GROUND, (CCTS 2, 4, 6)	TRENCH	
LSR-146	150	1	3" PVC	(4)#4, (1)#4 GROUND, (CCTS 2, 4, 6)	TRENCH	
LSR-147	250	1	3" PVC	(4)#4, (1)#4 GROUND, (CCTS 2, 4, 6)	TRENCH	
**LSR-148	175	1	3" PVC	(4)#4, (1)#4 GROUND, (CCTS 2, 4, 6)	TRENCH	
*LSR-185	-	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	LTG CCTS FROM 240/120V LTG DISTRIBUTION CABINET LC-06 (SW CORNER)
LSR-186	46	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-187	23	1	3" PVC	(2)#6, (1)#6 GROUND, (CCT 8)	TRENCH	
LSR-188	44	2 (ONE SPARE)	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-189	46	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-190	68	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-191	65	1	1" RGS	(2)#6, (1)#6 GROUND, (CCTS 8)	TRENCH IN GRADE AND THEN EXPOSED CONDUIT TO WALL FIXTURE ALONG MSE WALL	
LSR-192	135	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-193	49	1	1" RGS	(2)#6, (1)#6 GROUND, (CCT 6)	TRENCH IN GRADE AND THEN EXPOSED CONDUIT TO WALL FIXTURE ALONG MSE WALL	
LSR-194	110	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-195	30	2 (ONE SPARE)	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-196	35	2 (ONE SPARE)	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-197	18	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-198	101	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 6, 8)	TRENCH	
LSR-199	107	1	3" PVC	(2)#4, (1)#4 GROUND, (CCT 6)	TRENCH	
*LSR-205	-	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 9, 11)	TRENCH	
LSR-206	16	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 9, 11)	TRENCH	
LSR-207	80	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 9, 11)	TRENCH	
LSR-208	12	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 9, 11)	TRENCH	
LSR-209	65	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 9, 11)	TRENCH	
LSR-210	46	1	1" RGS	(2)#6, (1)#6 GROUND, (CCT 11)	TRENCH IN GRADE AND THEN EXPOSED CONDUIT TO WALL FIXTURE ALONG MSE WALL	
LSR-211	136	1	3" PVC	(3)#4, (1)#4 GROUND, (CCTS 9, 11)	TRENCH	
LSR-212	44	1	1" RGS	(2)#6, (1)#6 GROUND, (CCT 9)	TRENCH IN GRADE AND THEN EXPOSED CONDUIT TO WALL FIXTURE ALONG MSE WALL	
LSR-213	85	1	3" PVC	(2)#4, (1)#4 GROUND, (CCT 11)	TRENCH	

* CONTINUED FROM DWG. LI-21
** CONTINUED TO DWG. LI-22

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-71	LC-06 (240/120V)-CCT 6	65+65.80 B/L RAMP K	36.90' RT	30'	8'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-72	LC-06 (240/120V)-CCT 8	94+12.87 B/L RAMP L	64.40' RT	30'	8'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-74	LC-06-240/120V-CCT 6	93+13.50 B/L RAMP L	28.00' RT	30'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-88	LC-06 240/120V-CCT 8	65+75.00 B/L RAMP K	30.83' LT	30'	8'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-89	LC-06-240/120V-CCT 11	93+61.20 B/L RAMP L	49.60' LT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-90	LC-06-240/120V-CCT 6	57+88.00 B/L RAMP J	47.70' LT	30'	8'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-90A	LC-06-240/120V-CCT 9	25+67.50 B/L RAMP I	41.80' LT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-91	LC-06-240/120V-CCT 8	57+30.00 B/L RAMP J	28.00' RT	30'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-92	LC-06-240/120V-CCT 6	57+89.00 B/L RAMP J	59.50' RT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
LST-100	LC-240/120V-CCT 11	25+75.00 B/L RAMP I	49.30' RT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY XMFR BASE	III	150W HPS
WP-1	LC-240/120V-CCT 6	14+58.25 B/L CR		13'	NA	WALL PACK	WALL MOUNT FLOODLIGHT		200W HPS
WP-2	LC-240/120V-CCT 8	15+54.70 B/L CR		13'	NA	WALL PACK	WALL MOUNT FLOODLIGHT		200W HPS
WP-3	LC-240/120V-CCT 11	15+60.00 B/L CR		13'	NA	WALL PACK	WALL MOUNT FLOODLIGHT		200W HPS
WP-4	LC-240/120V-CCT 9	14+62.40 B/L CR		13'	NA	WALL PACK	WALL MOUNT FLOODLIGHT		200W HPS

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

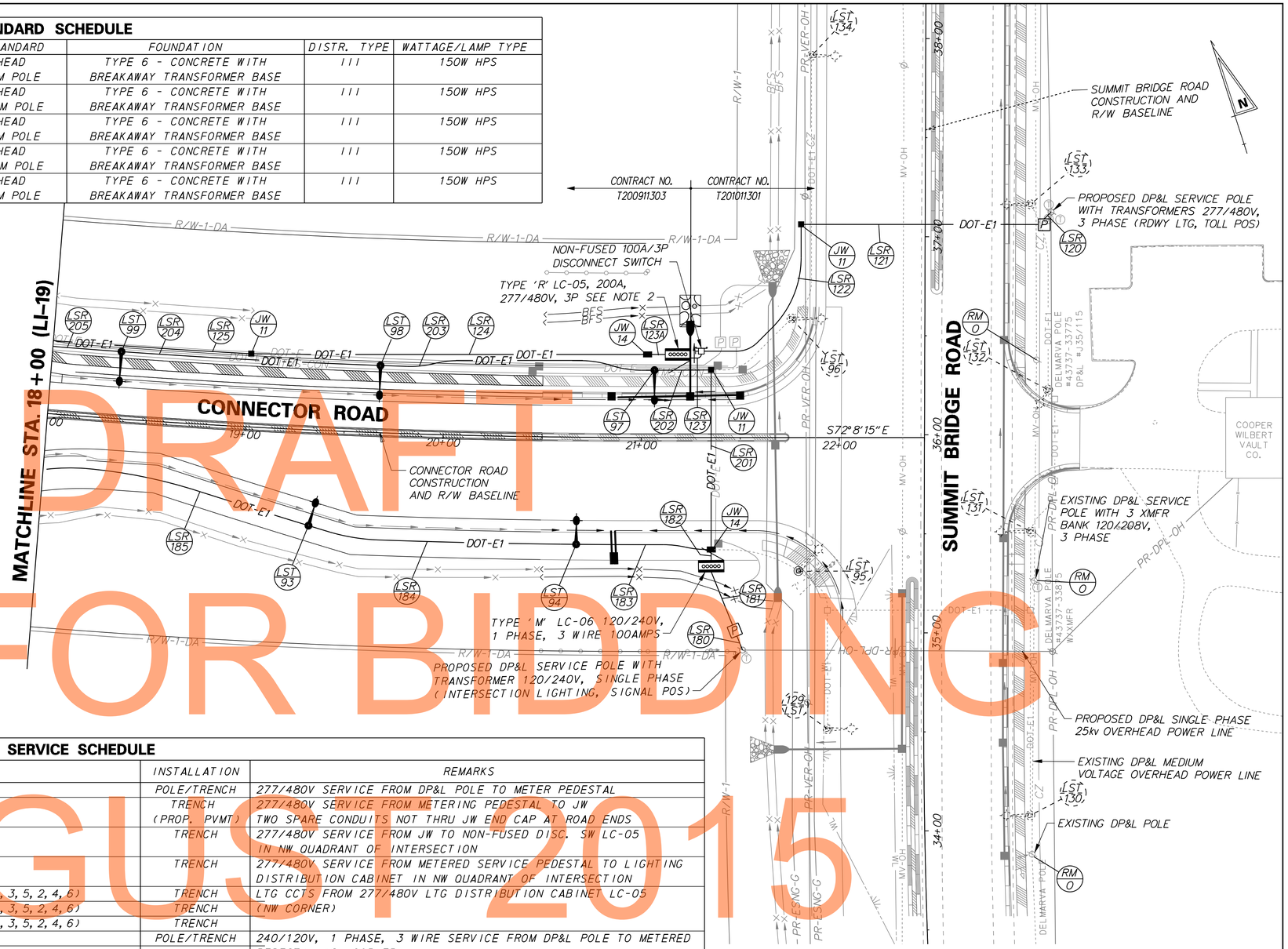
CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: A. AGGARWAL
CHECKED BY: D. L. BAKER

LIGHTING PLAN
LIGHTING SCHEDULES

LI-20
SHEET NO. 1019
TOTAL SHTS. 1256

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-93	LC-06 240/120V CCT #8	19+34 B/L SBC RD	48.30' RT	30'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS
LST-94	LC-06 240/120V CCT #6	20+67 B/L SBC RD	54.10' RT	30'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS
LST-97	LC-06 240/120V CCT #9	21+07 B/L SBC RD	34.25' LT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS
LST-98	LC-06 240/120V CCT #11	19+68 B/L SBC RD	34.25' LT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS
LST-99	LC-06 240/120V CCT #9	18+35 B/L SBC RD	34.25' LT	30'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	150W HPS



LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
LSR-120	35	1	2" RGS	(4) #1/0, (1) #6 GROUND	POLE/TRENCH	277/480V SERVICE FROM DP&L POLE TO METER PEDESTAL
LSR-121	125	3 (1 FOR TOLL BOOTH/ ITMS AND ONE SPARE)	2½" PVC	(4) #1/0, (1) #6 GROUND	TRENCH (PROP. PVMT)	277/480V SERVICE FROM METERING PEDESTAL TO JW TWO SPARE CONDUITS NOT THRU JW END CAP AT ROAD ENDS
LSR-122	100	1	2½" PVC	(4) #1/0	TRENCH	277/480V SERVICE FROM JW TO NON-FUSED DISC. SW LC-05 IN NW QUADRANT OF INTERSECTION
LSR-123	12	1	2½" PVC	(4) #1/0, (1)#6 GROUND	TRENCH	277/480V SERVICE FROM METERED SERVICE PEDESTAL TO LIGHTING DISTRIBUTION CABINET IN NW QUADRANT OF INTERSECTION
LSR-123A	10	4 (3 SPARE)	4" PVC	(8) #4, (1)#4 GROUND, (CCTS 1, 3, 5, 2, 4, 6)	TRENCH	LTG CCTS FROM 277/480V LTG DISTRIBUTION CABINET LC-05
LSR-124	220	1	3" PVC	(8) #4, (1)#4 GROUND, (CCTS 1, 3, 5, 2, 4, 6)	TRENCH	(NW CORNER)
*LSR-125	197	1	3" PVC	(8) #4, (1)#4 GROUND, (CCTS 1, 3, 5, 2, 4, 6)	TRENCH	
LSR-180	40	1	2" RGS	(3) #2	POLE/TRENCH	240/120V, 1 PHASE, 3 WIRE SERVICE FROM DP&L POLE TO METERED PEDESTAL (SW CORNER)
LSR-181	40	1	2" PVC	(3) #2, (1)#4 GROUND	TRENCH	240/120V SERVICE FROM METERED PEDESTAL TO THE LIGHTING DISTRIBUTION CABINET LC-06 (SW CORNER)
LSR-182	10	4 (THREE SPARE-TWO FOR INTERSECTION LTG)	4" PVC	(3) #4, (1)#4 GROUND (CCT 6, 8); (3) #4, (1)#4 GROUND (CCT 9, 11) IN ONE CONDUIT	TRENCH	LTG CCTS FROM 240/120V LTG DISTRIBUTION CABINET LC-06 (SW CORNER)
LSR-183	67	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 6, 8)	TRENCH	
LSR-184	136	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 6, 8)	TRENCH	
*LSR-185	195	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 6, 8)	TRENCH	
LSR-201	85	3 (TWO SPARE- ONE FOR INTERSECTION LTG)	3" PVC	(3) #4, (1)#4 GROUND (CCT 9, 11)	TRENCH (PROP. PVMT)	LTG CCTS FROM 240/120V LTG DISTRIBUTION CABINET LC-06 (SW CORNER)
LSR-202	29	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 9, 11)	TRENCH	
LSR-203	139	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 9, 11)	TRENCH	
LSR-204	131	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 9, 11)	TRENCH	
*LSR-205	118	1	3" PVC	(3) #4, (1)#4 GROUND (CCT 9, 11)	TRENCH	

* CONTINUED TO DWG. LI-19

NOTES:

1. INTERSECTION LIGHTING POLES (LST-95, LST-96 AND LST-129 THRU LST-134 QTY. 8 TOTAL) AND CORRESPONDING UNDERGROUND CONDUITS WILL BE INSTALLED UNDER CONTRACT T201011301. COORDINATE WITH CONTRACT T201011301 FOR INSTALLATION OF LIGHTING DISTRIBUTION CABINETS LC-05 AND LC-06 AND THE SERVICE DROPS UNDER THIS CONTRACT.
2. COORDINATE WITH OTHER DISCIPLINE CONTRACTORS FOR LOCATION OF LC-05. SUBMIT A DETAILED DIMENSIONED SKETCH SHOWING LOCATION OF LC-05, DISCONNECT SWITCH, OTHER SERVICE PEDESTALS AND JUNCTION WELLS TO THE ENGINEER FOR APPROVAL PRIOR TO ROUGH-IN.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

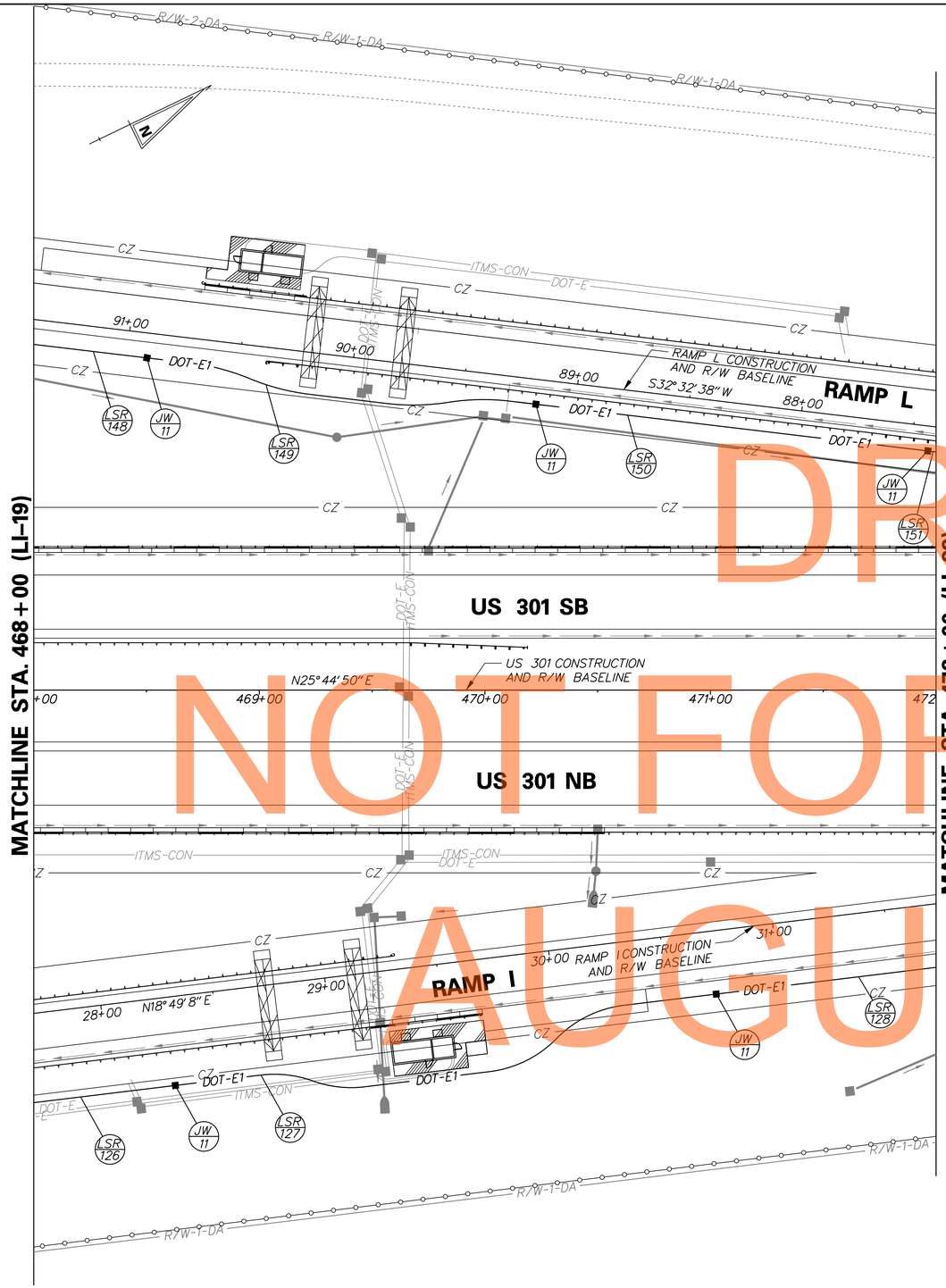
SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

LI-21
SHEET NO.
1020
TOTAL SHTS.
1256



MATCHLINE STA. 468+00 (LI-19)

MATCHLINE STA. 472+00 (LI-23)

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-126	-	1	3" PVC	(4)#4, #4 GROUND, CCTS (1, 3, 5)	TRENCH	LTG CCTS FROM SBR/CONNECTOR RD INTERSECTION LTG 277/480V DISTRIBUTION CABINET LC-05
LSR-127	250	1	3" PVC	(4)#4, #4 GROUND, CCTS (1, 3, 5)	TRENCH	
**LSR-128	220	1	3" PVC	(4)#4, #4 GROUND, CCTS (1, 3, 5)	TRENCH	
*LSR-148	-	1	3" PVC	(4)#4, #4 GROUND, CCTS (2, 4, 6)	TRENCH	
LSR-149	175	1	3" PVC	(4)#4, #4 GROUND, CCTS (2, 4, 6)	TRENCH	
LSR-150	175	1	3" PVC	(4)#4, #4 GROUND, CCTS (2, 4, 6)	TRENCH	
**LSR-151	247	1	3" PVC	(4)#4, #4 GROUND, CCTS (2, 4, 6)	TRENCH	

* CONTINUED FROM DWG. LI-19

** CONTINUED TO DWG. LI-23

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: A. AGGARWAL
CHECKED BY: D. L. BAKER

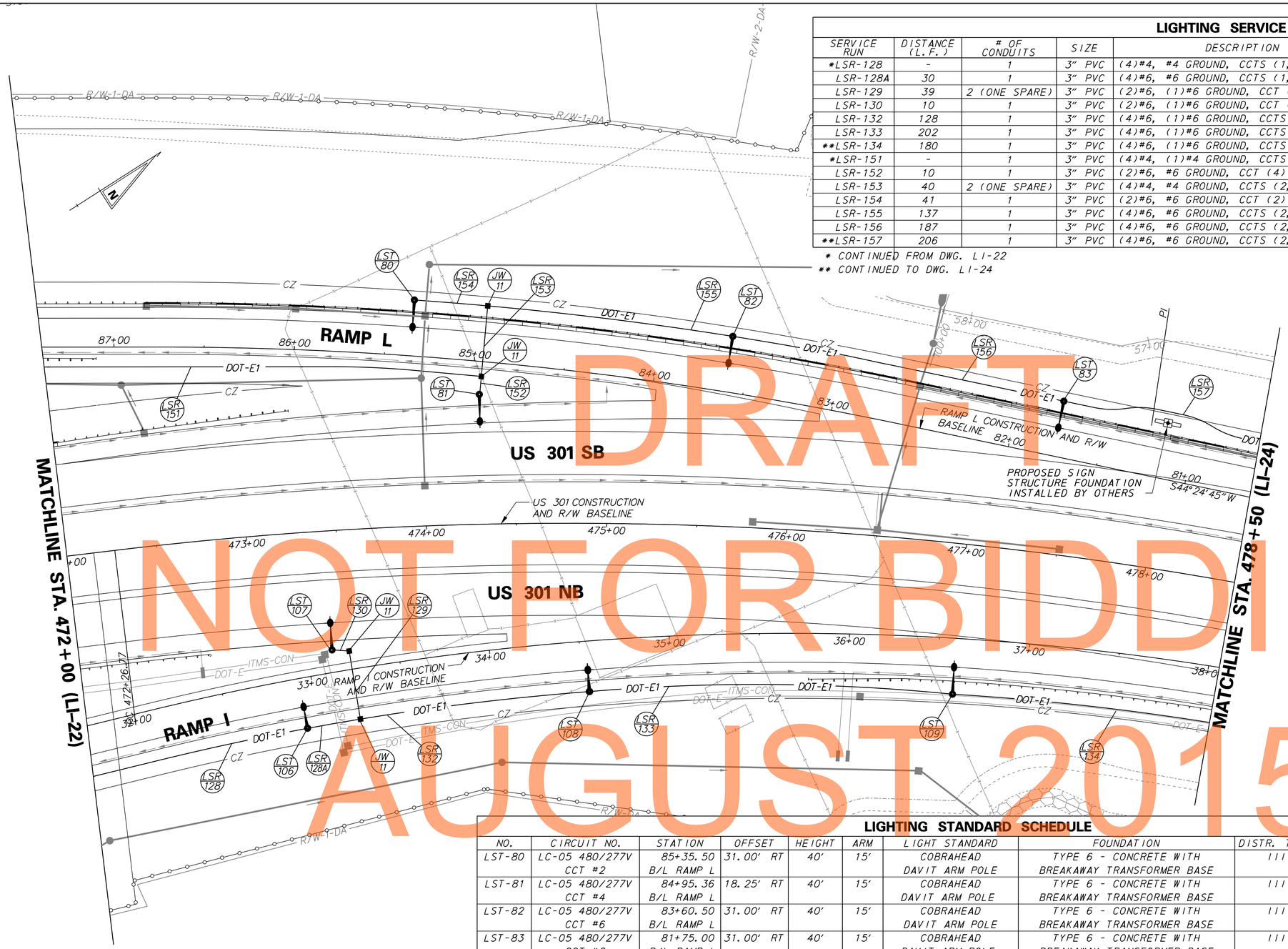
LIGHTING PLAN

LI-22
SHEET NO. 1021
TOTAL SHTS. 1256

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-128	-	1	3" PVC	(4)#4, #4 GROUND, CCTS (1, 3, 5,)	TRENCH	
LSR-128A	30	1	3" PVC	(4)#6, #6 GROUND, CCTS (1, 3, 5,)	TRENCH	
LSR-129	39	2 (ONE SPARE)	3" PVC	(2)#6, (1)#6 GROUND, CCT (3)	TRENCH UNDER PVMT	
LSR-130	10	1	3" PVC	(2)#6, (1)#6 GROUND, CCT (3)	TRENCH	
LSR-132	128	1	3" PVC	(4)#6, (1)#6 GROUND, CCTS (1, 3, 5)	TRENCH	
LSR-133	202	1	3" PVC	(4)#6, (1)#6 GROUND, CCTS (1, 3, 5)	TRENCH	LTG CCTS FROM SBR/CONNECTOR RD INTERSECTION 277/480V LIGHTING DISTRIBUTION CABINET LC-05
**LSR-134	180	1	3" PVC	(4)#6, (1)#6 GROUND, CCTS (1, 3, 5)	TRENCH	
*LSR-151	-	1	3" PVC	(4)#4, (1)#4 GROUND, CCTS (2, 4, 6)	TRENCH	
LSR-152	10	1	3" PVC	(2)#6, #6 GROUND, CCT (4)	TRENCH	
LSR-153	40	2 (ONE SPARE)	3" PVC	(4)#4, #4 GROUND, CCTS (2, 4, 6)	TRENCH UNDER PVMT	
LSR-154	41	1	3" PVC	(2)#6, #6 GROUND, CCT (2)	TRENCH	
LSR-155	137	1	3" PVC	(4)#6, #6 GROUND, CCTS (2, 4, 6)	TRENCH	
LSR-156	187	1	3" PVC	(4)#6, #6 GROUND, CCTS (2, 4, 6)	TRENCH	
**LSR-157	206	1	3" PVC	(4)#6, #6 GROUND, CCTS (2, 4, 6)	TRENCH	

* CONTINUED FROM DWG. LI-22
** CONTINUED TO DWG. LI-24



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-80	LC-05 480/277V CCT #2	85+35.50 B/L RAMP L	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-81	LC-05 480/277V CCT #4	84+95.36 B/L RAMP L	18.25' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-82	LC-05 480/277V CCT #6	83+60.50 B/L RAMP L	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-83	LC-05 480/277V CCT #2	81+75.00 B/L RAMP L	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-106	LC-05 480/277V CCT #1	32+93.00 B/L RAMP I	28.00' RT	40'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-107	LC-05 480/277V CCT #3	33+14.00 B/L RAMP I	12.40' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-108	LC-05 480/277V CCT #5	34+53.50 B/L RAMP I	28.00' RT	40'	12'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-109	LC-05 480/277V CCT #1	36+59.00 B/L RAMP I	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
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FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

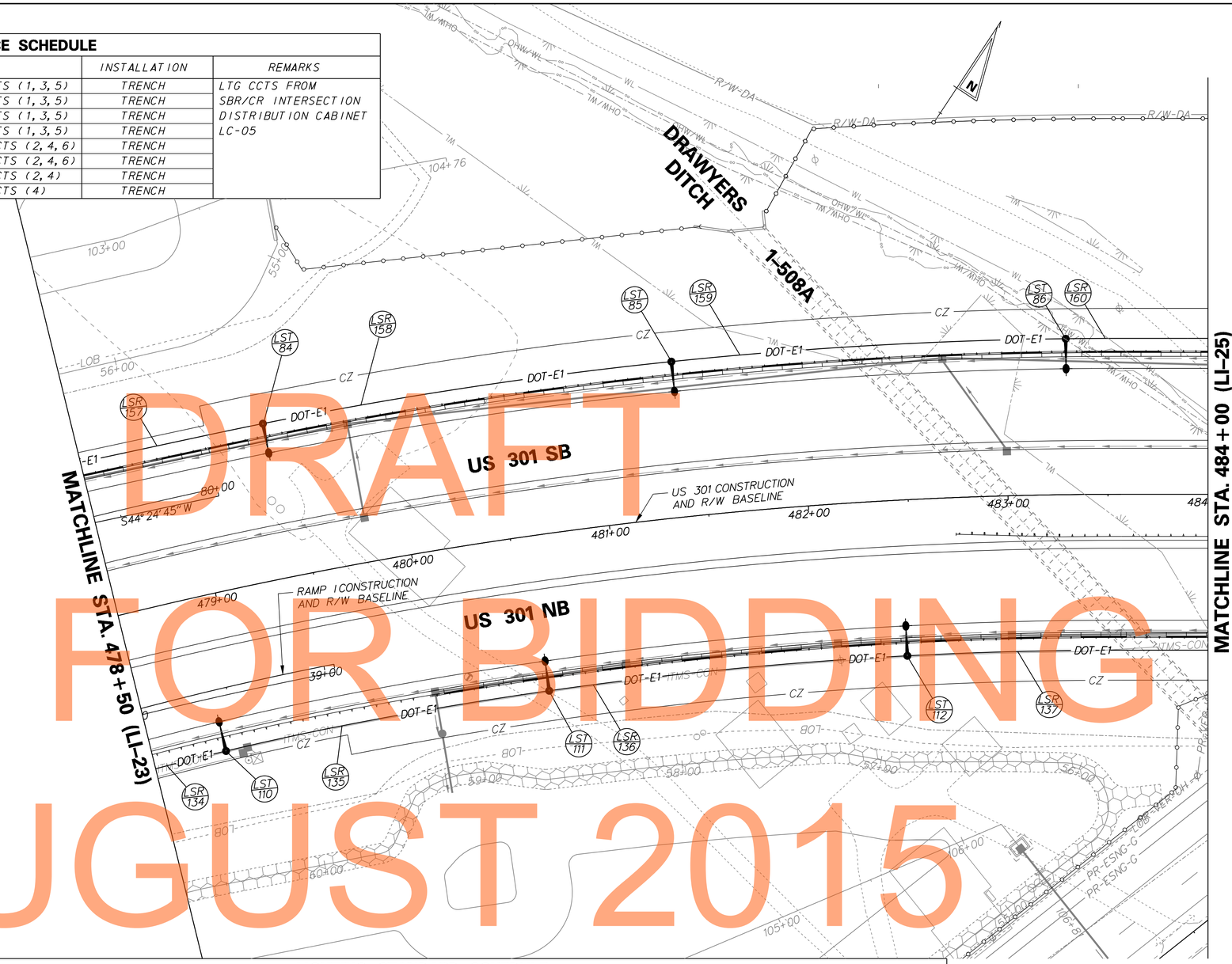
LI-23	
SHEET NO.	1022
TOTAL SHTS.	1256

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
**LSR-134	-	1	3" PVC	(4)#6, (1)#6 GROUND CCTS (1, 3, 5)	TRENCH	LTG CCTS FROM SBR/CR INTERSECTION DISTRIBUTION CABINET LC-05
LSR-135	165	1	3" PVC	(4)#6, (1)#6 GROUND CCTS (1, 3, 5)	TRENCH	
LSR-136	180	1	3" PVC	(4)#6, (1)#6 GROUND CCTS (1, 3, 5)	TRENCH	
*LSR-137	175	1	3" PVC	(4)#6, (1)#6 GROUND CCTS (1, 3, 5)	TRENCH	
**LSR-157	-	1	3" PVC	(4)#6, (1)#6 GROUND, CCTS (2, 4, 6)	TRENCH	
LSR-158	207	1	3" PVC	(4)#6, (1)#6 GROUND, CCTS (2, 4, 6)	TRENCH	
LSR-159	198	1	3" PVC	(3)#6, (1)#6 GROUND, CCTS (2, 4)	TRENCH	
*LSR-160	206	1	3" PVC	(2)#6, (1)#6 GROUND, CCTS (4)	TRENCH	

* CONTINUED TO DWG. LI-24

** CONTINUED FROM DWG. LI-22



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-84	LC-05 480/277V CCT #4	479+40.00 B/L US 301	78.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-85	LC-05 480/277V CCT #6	481+39.50 B/L US 301	78.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-86	LC-05 480/277V CCT #2	483+30.00 B/L US 301	78.00' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-110	LC-05 480/277V CCT #3	38+42.50 B/L RAMP I	31.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-111	LC-05 480/277V CCT #5	480+58.50 B/L US 301	78.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-112	LC-05 480/277V CCT #1	482+45.50 B/L US 301	78.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

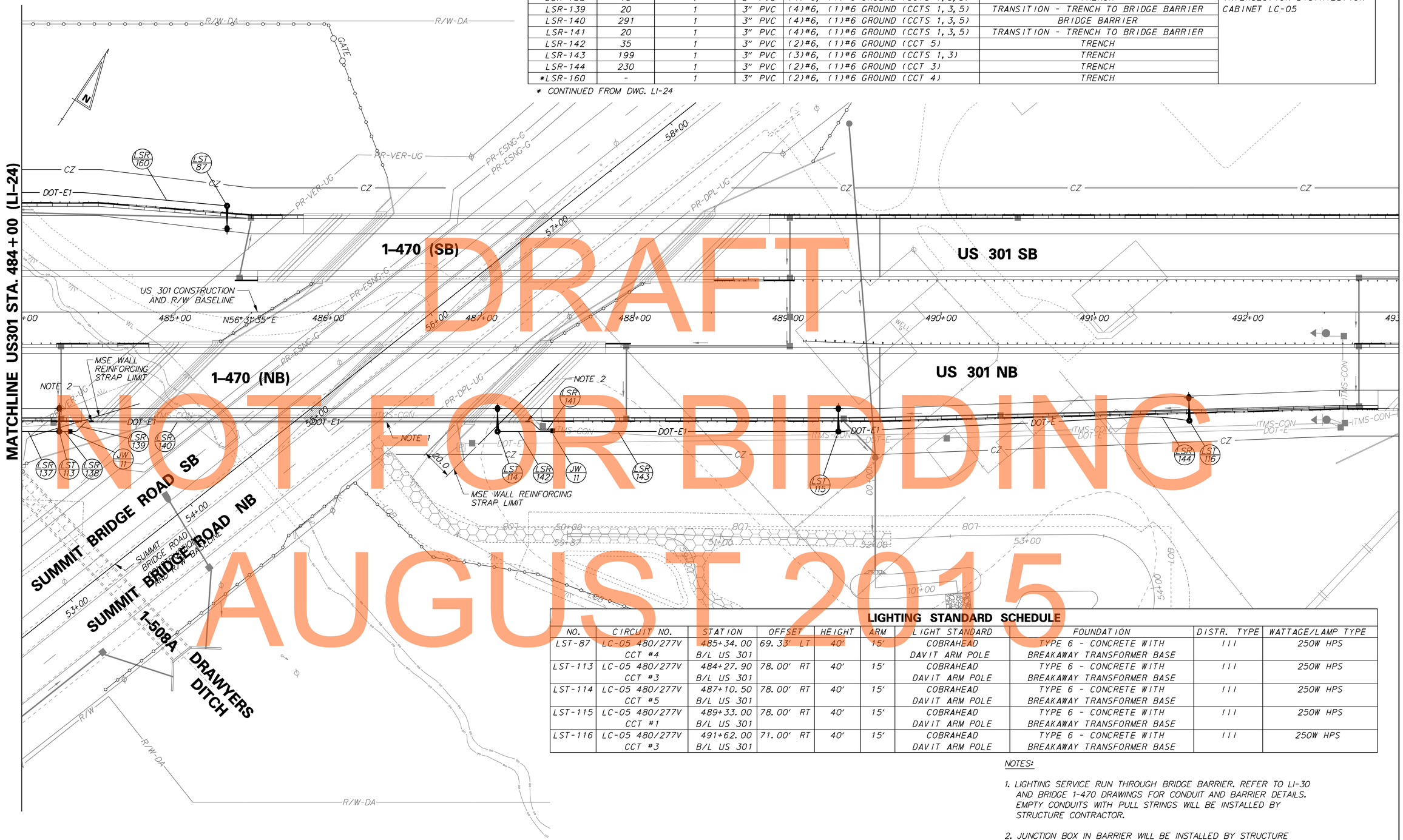
LIGHTING PLAN

LI-24
SHEET NO.
1023
TOTAL SHTS.
1256

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	# OF CONDUITS	SIZE	DESCRIPTION	INSTALLATION	REMARKS
*LSR-137	-	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	LTG CCTS FROM CONNECTOR RD INTERSECTION DISTRIBUTION CABINET LC-05
LSR-138	10	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRENCH	
LSR-139	20	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - TRENCH TO BRIDGE BARRIER	
LSR-140	291	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	BRIDGE BARRIER	
LSR-141	20	1	3" PVC	(4)#6, (1)#6 GROUND (CCTS 1, 3, 5)	TRANSITION - TRENCH TO BRIDGE BARRIER	
LSR-142	35	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 5)	TRENCH	
LSR-143	199	1	3" PVC	(3)#6, (1)#6 GROUND (CCTS 1, 3)	TRENCH	
LSR-144	230	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 3)	TRENCH	
*LSR-160	-	1	3" PVC	(2)#6, (1)#6 GROUND (CCT 4)	TRENCH	

* CONTINUED FROM DWG. LI-24



LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	HEIGHT	ARM	LIGHT STANDARD	FOUNDATION	DISTR. TYPE	WATTAGE/LAMP TYPE
LST-87	LC-05 480/277V CCT #4	485+34.00 B/L US 301	69.33' LT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-113	LC-05 480/277V CCT #3	484+27.90 B/L US 301	78.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-114	LC-05 480/277V CCT #5	487+10.50 B/L US 301	78.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-115	LC-05 480/277V CCT #1	489+33.00 B/L US 301	78.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS
LST-116	LC-05 480/277V CCT #3	491+62.00 B/L US 301	71.00' RT	40'	15'	COBRAHEAD DAVIT ARM POLE	TYPE 6 - CONCRETE WITH BREAKAWAY TRANSFORMER BASE	III	250W HPS

NOTES:

1. LIGHTING SERVICE RUN THROUGH BRIDGE BARRIER. REFER TO LI-30 AND BRIDGE 1-470 DRAWINGS FOR CONDUIT AND BARRIER DETAILS. EMPTY CONDUITS WITH PULL STRINGS WILL BE INSTALLED BY STRUCTURE CONTRACTOR.
2. JUNCTION BOX IN BARRIER WILL BE INSTALLED BY STRUCTURE CONTRACTOR. REFER TO LI-30 FOR DETAILS.

$FILES
$DATES
$USERS

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

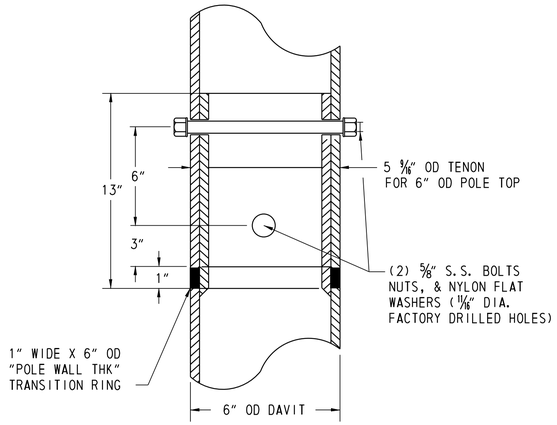
SCALE
0 30 60 90
FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

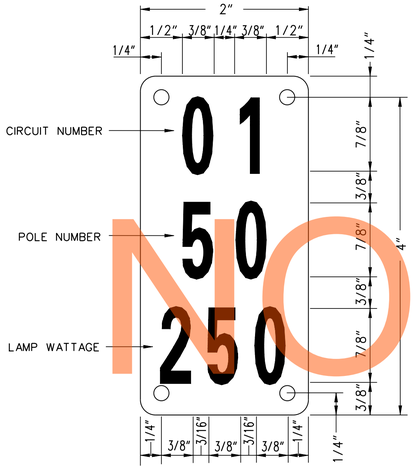
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN

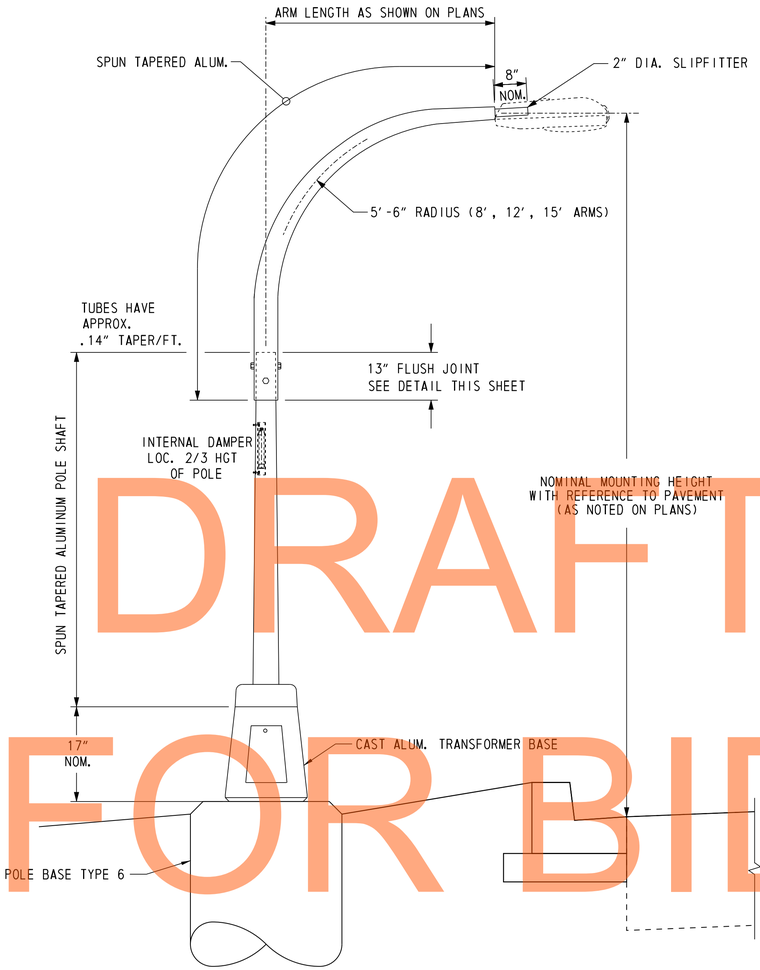
LI-25
SHEET NO.
1024
TOTAL SHTS.
1256



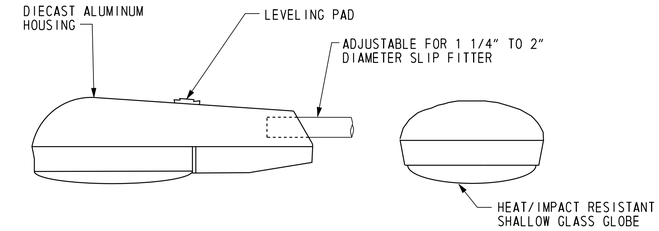
FLUSH JOINT DETAIL



TYPICAL POLE I.D. TAG

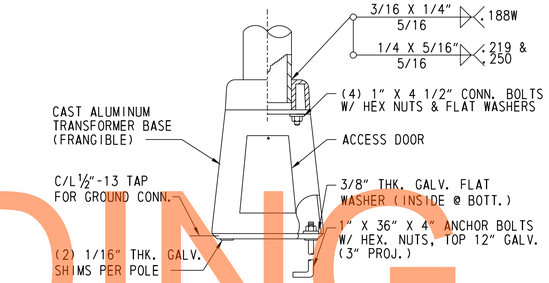


DAVIT ARM LIGHT POLE DETAIL



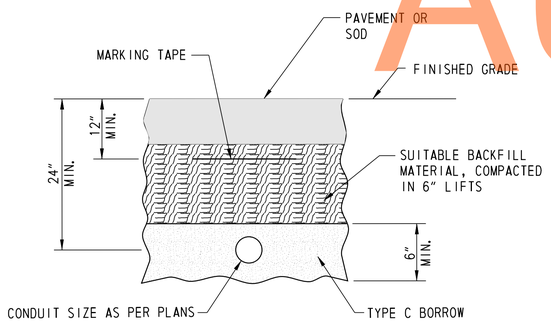
COBRAHEAD LUMINAIRE DETAIL

NOTE: COBRAHEAD STYLE ROADWAY LUMINAIRES SHALL BE HIGH PRESSURE SODIUM WITH CUTOFF OPTICS. HORIZONTAL DISTRIBUTION TYPE AND WATTAGE SHALL BE AS SPECIFIED ON PLANS. ALL LUMINAIRES SHALL BE MOUNTED AT A ZERO DEGREE TILT ANGLE. PHOTOCONTROL SHALL BE LOCATED AT THE LIGHTING CONTROL CENTER ENCLOSURE, UNLESS OTHERWISE NOTED. LUMINAIRE SHALL BE LABELED WITH AN IDENTIFICATION STICKER IN ACCORDANCE WITH NEMA CONVENTIONS.

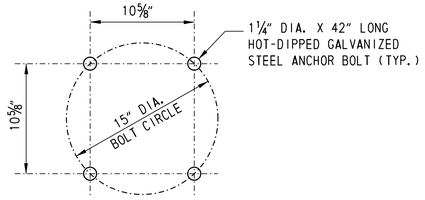


TRANSFORMER BASE DETAIL

NOTES:
1. TRANSFORMER BASE SHALL BE PROVIDED WITH ALL LIGHT POLES, WHETHER PROTECTED OR UNPROTECTED, UNLESS OTHERWISE NOTED.
2. REFER TO NOTES FOR THE ANCHOR BASE DETAIL FOR CONDITIONS WHERE AN ANCHOR BASE IS REQUIRED.
3. TRANSFORMER BASE SHALL MEET 1985 AASHTO BREAKAWAY REQUIREMENTS.
4. ACCESS DOOR OPENING SHALL BE ON THE SIDE OF THE POLE AWAY FROM TRAFFIC.
5. BOLT CIRCLE SHALL BE AS PER MANUFACTURERS' SPECIFICATIONS.



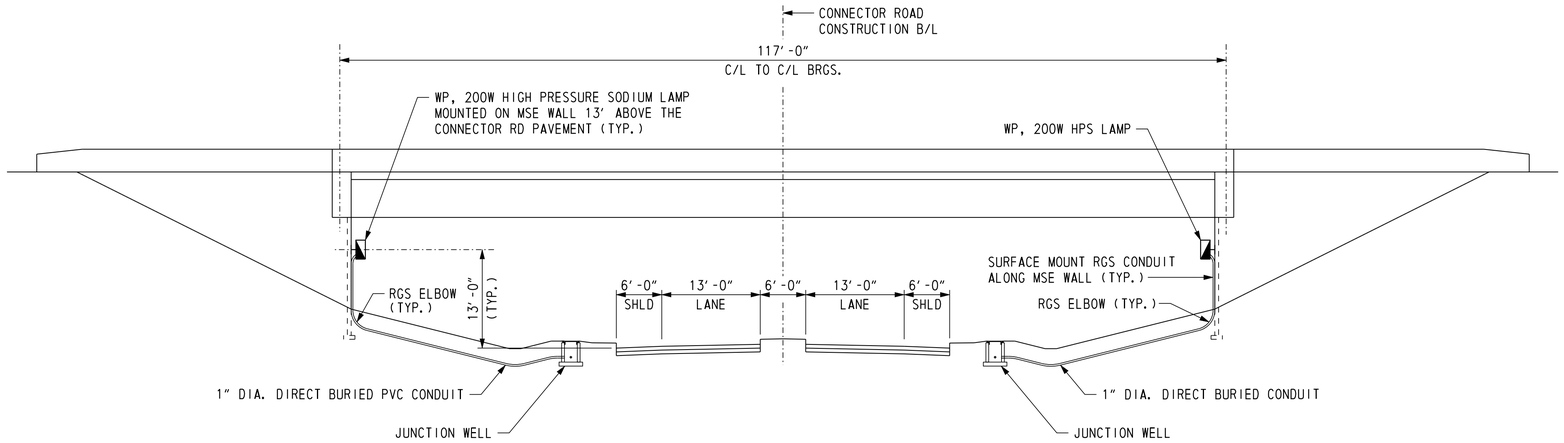
BURIED CONDUIT DETAIL



FOUNDATION ANCHOR BOLT CIRCLE DETAIL

$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	LIGHTING PLAN LIGHTING DETAILS 1
				COUNTY NEW CASTLE	DESIGNED BY: A. AGGARWAL	LI-26
					CHECKED BY: D.L. BAKER	SHEET NO. 1025
						TOTAL SHTS. 1256

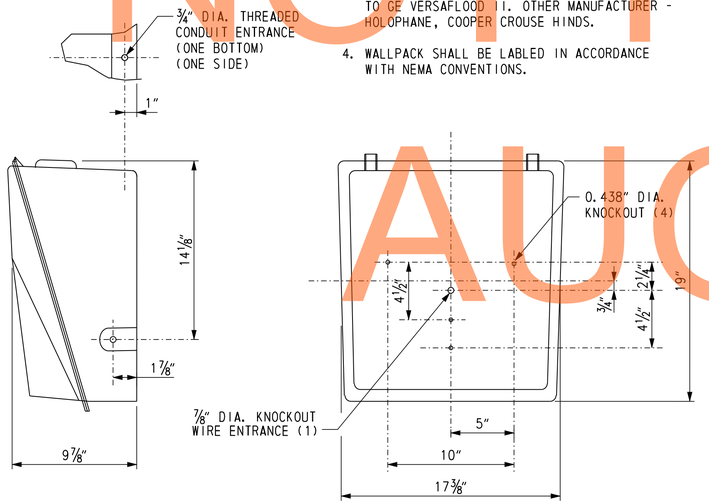


INSTALLATION DETAIL OF TYPE 'WP' FIXTURES ON BRIDGE 1-507N&S MSE WALLS

(REFER TO DWG. LI-19 FOR LOCATION)

UNDER BRIDGE LIGHTING DETAIL NOTES:

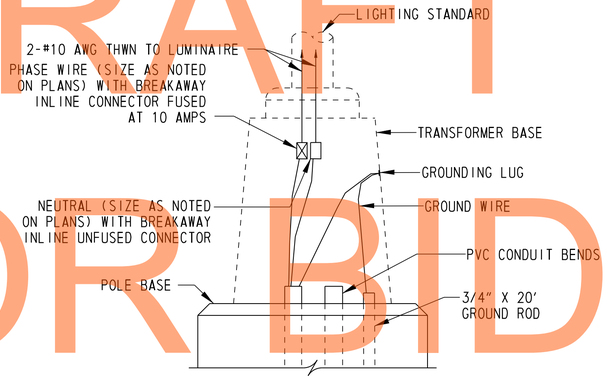
1. UNDER BRIDGE LIGHT SHALL BE EQUIPPED WITH A 200 WATT HIGH PRESSURE SODIUM LAMP.
2. ATTACH TO MSE WALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADDITIONAL WEATHERPROOF JUNCTION BOX AS REQUIRED.
3. DIMENSION SHOWN MAY VARY DEPENDING UPON THE MANUFACTURER. FIXTURE SHALL BE EQUAL TO GE VERSAFLOOD II. OTHER MANUFACTURER - HOLOPHANE, COOPER CROUSE HINDS.
4. WALLPACK SHALL BE LABLED IN ACCORDANCE WITH NEMA CONVENTIONS.



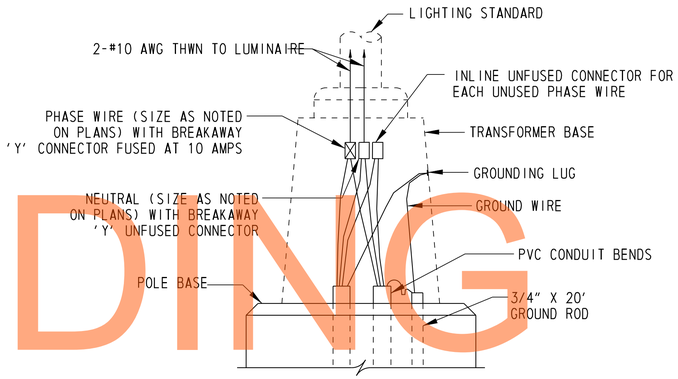
SIDE FRONT

WALLPACK LIGHTER - TYPE 'WP' FIXTURES

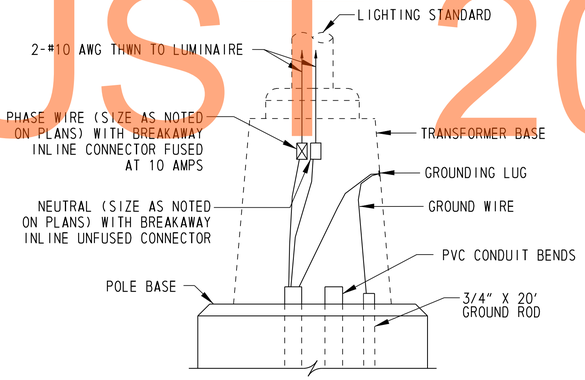
NOT TO SCALE



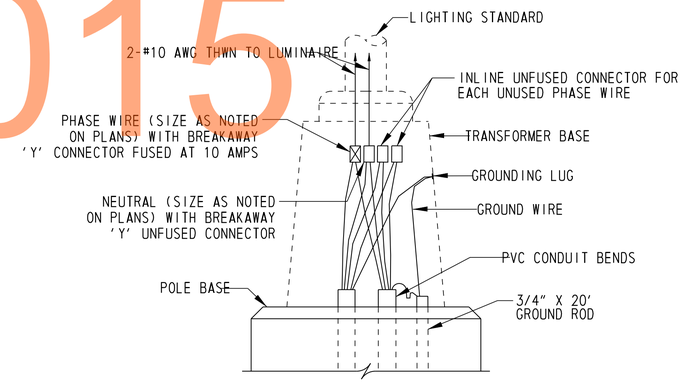
TYPICAL LUMINAIRE CONNECTION END OF CABLE RUN - 120/240 VOLT



LUMINAIRE CONNECTION CONTINUOUS CABLE RUN - 120/240 VOLT



TYPICAL LUMINAIRE CONNECTION END OF CABLE RUN - 277/480 VOLT



LUMINAIRE CONNECTION CONTINUOUS CABLE RUN - 277/480 VOLT

$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

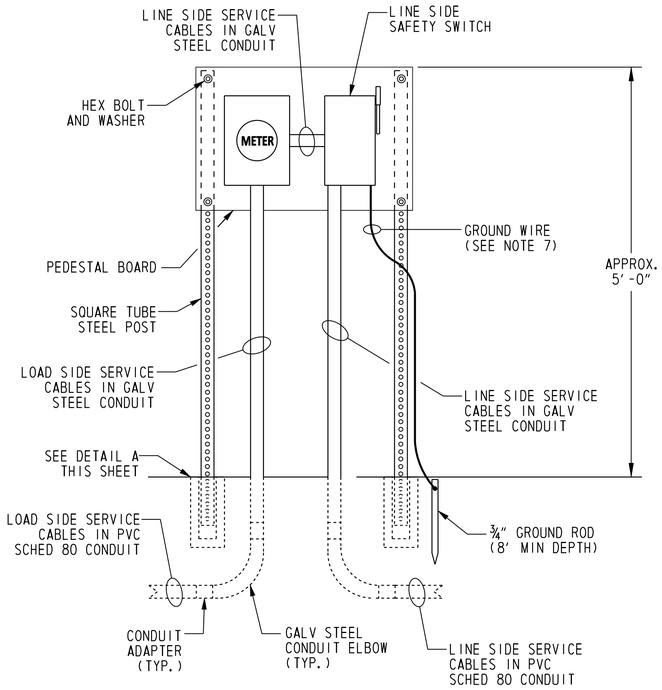
US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: A. AGGARWAL
NEW CASTLE	CHECKED BY: D.L. BAKER

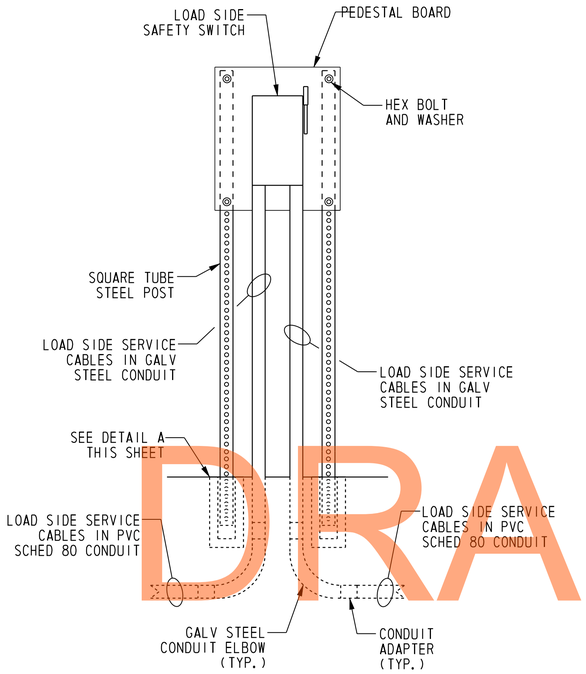
LIGHTING PLAN

LIGHTING DETAILS 2

LI-27
SHEET NO.
1026
TOTAL SHTS.
1256



SERVICE PEDESTAL



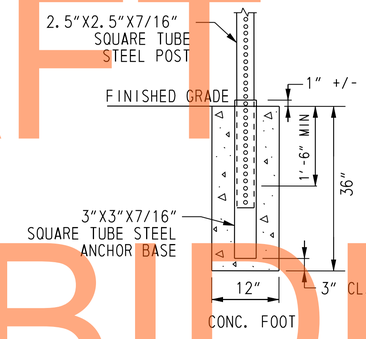
LOAD SIDE SAFETY SWITCH

METERED SERVICE PEDESTAL

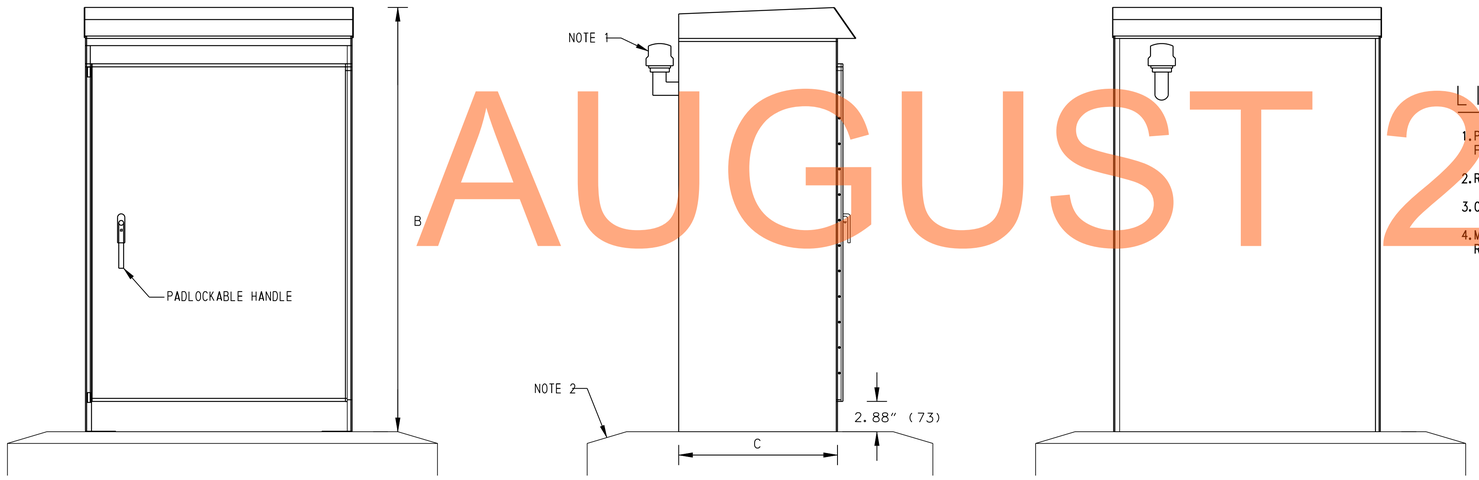
NOT TO SCALE

METERED SERVICE PEDESTAL CONSTRUCTION NOTES

1. LINE SIDE SAFETY SWITCH AND METER SHALL BE LOCATED ADJACENT TO SERVICE DROP LOCATION. LINE SIDE SAFETY SWITCH SHALL BE FUSED AND SIZED TO SERVICE.
2. LOAD SIDE SAFETY SWITCH SHALL NOT BE FUSED.
3. ALL CONDUITS SHALL BE 2" DIAMETER.
4. HEX BOLTS AND WASHERS SHALL BE STAINLESS STEEL.
5. PEDESTAL BOARD SHALL BE ALUMINUM WITH 1/4" MIN THICKNESS.
6. SQUARE TUBE STEEL POST AND ANCHOR BASE SHALL BE MINIMUM 12 GAUGE.
7. GROUND WIRE SHALL BE #6 BARE COPPER SOLID. WIRE SHALL BE FASTENED TO SERVICE PEDESTAL SUPPORTS USING APPROVED METHODS. WIRE SHALL BE CONNECTED TO GROUND ROD BY EXOTHERMIC WELD. SEE SPECIFICATIONS FOR DETAILS.
8. SAFETY SWITCH SHALL BE CLEARLY MARKED WITH WEATHERPROOF STAMP. SWITCH SHALL BE LABELLED "LIGHTING", "SIGNAL", "CAMERA", "REPEATER" OR "RWIS" DENOTING THE DEVICE IT SERVES.



DETAIL A



FRONT VIEW | SIDE VIEW | BACK VIEW

LIGHTING CONTROL CABINET DETAIL

NOT TO SCALE

LIGHTING CONTROL CABINET CONSTRUCTION NOTES:

1. PHOTOCELL SHALL BE MOUNTED ON BACK OR SIDE OF CABINET ON 90 DEGREE CONDUIT FITTING TO AVOID VEHICLE HEADLIGHT GLARE.
2. REFER TO STANDARD DETAILS T-4-1 (2011) AND T-4-2 (2011) FOR CABINET BASE DETAILS.
3. CABINET SHALL BE NEMA 4X AND SHALL BE FABRICATED FROM 0.125 5052-H32 ALUMINUM.
4. METER AND LOAD-SIDE DISCONNECT SWITCH TO BE MOUNTED SEPARATELY FROM CABINET. REFER TO STANDARD DETAIL T-* METERED SERVICE PEDESTAL.

DIM.	CABINET TYPE	
	TYPE R	TYPE M
A	44" (1118)	30" (762)
B	77" (1956)	51" (1295)
C	25.5" (648)	16.88" (429)

$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

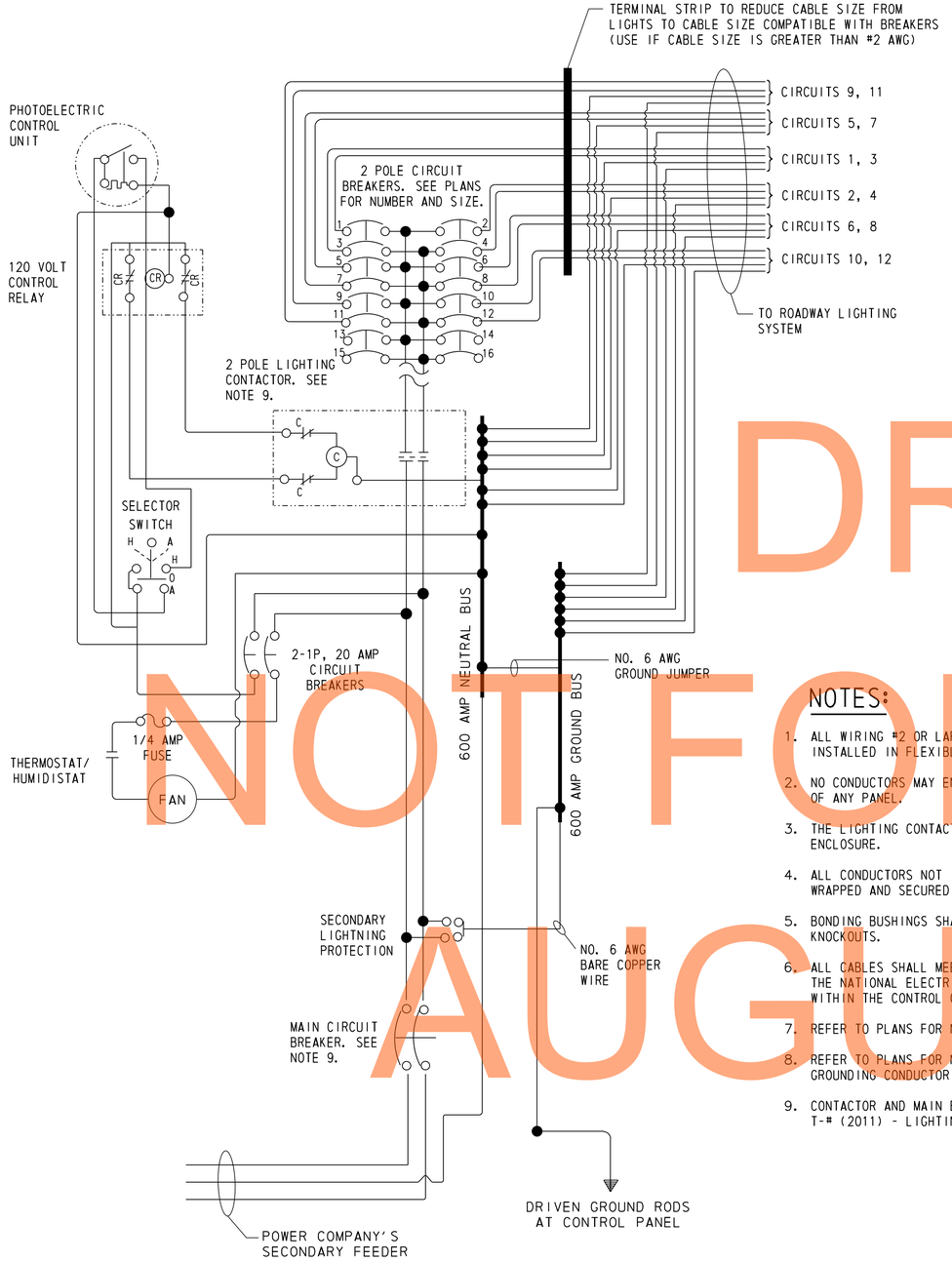
NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: A. AGGARWAL	
COUNTY	CHECKED BY: D. L. BAKER	
NEW CASTLE		

LIGHTING PLAN
LIGHTING DETAILS 3

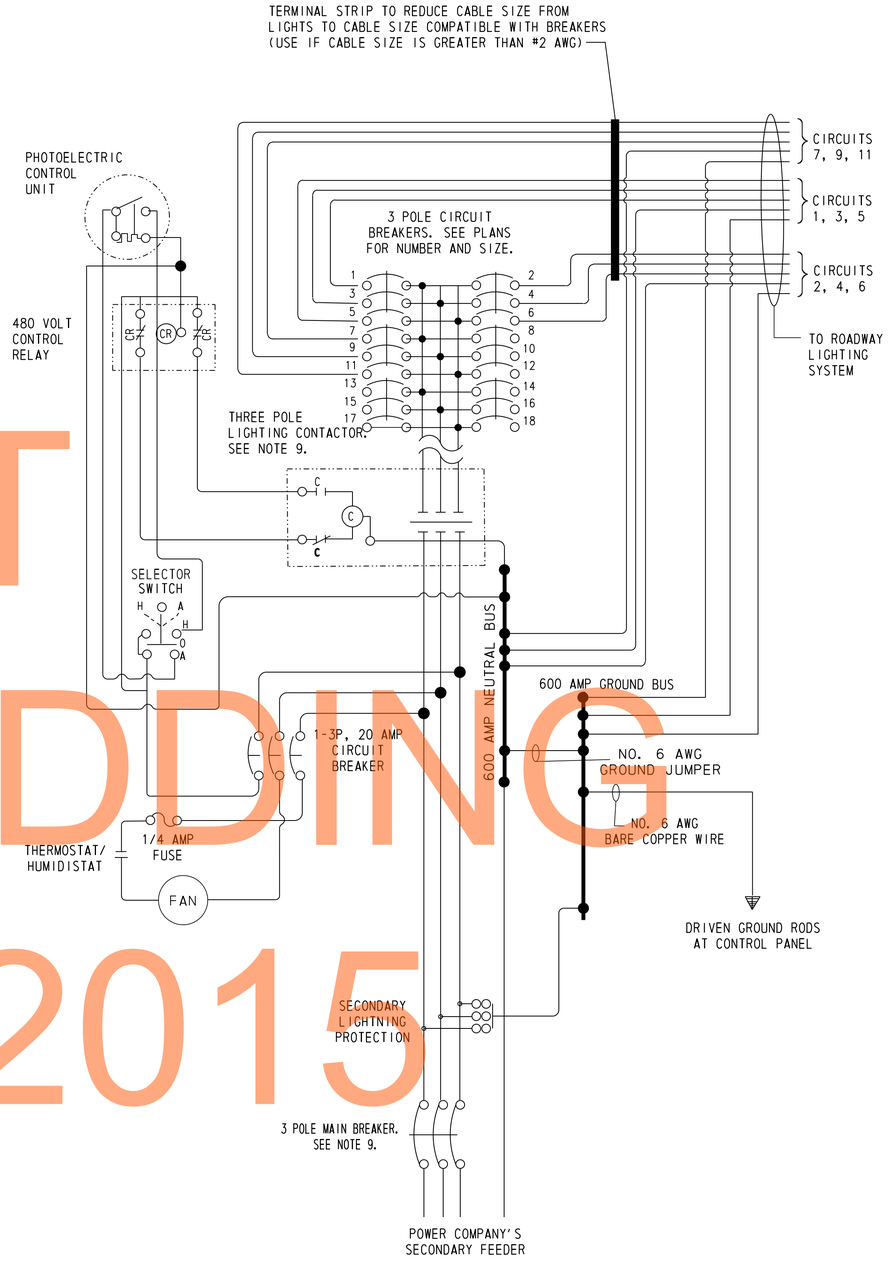
LI-28	
SHEET NO.	1027
TOTAL SHTS.	1256



120/240 VOLT
LIGHTING CONTROL CENTER WIRING DIAGRAM
(FOR ROUNDABOUT / INTERSECTIONS)

NOTES:

1. ALL WIRING #2 OR LARGER AS INDICATED ON PLANS SHALL BE INSTALLED IN FLEXIBLE CONDUIT FOR SERVICE FEEDS.
2. NO CONDUCTORS MAY ENTER OR EXIT THROUGH THE REAR OF ANY PANEL.
3. THE LIGHTING CONTACTOR SHALL BE IN A PROPERLY SIZED ENCLOSURE.
4. ALL CONDUCTORS NOT IN CONDUIT SHALL BE BUNDLED OR WRAPPED AND SECURED IN CABINET AWAY FROM SHARP EDGES.
5. BONDING BUSHINGS SHALL BE USED FOR ALL CONCENTRIC KNOCKOUTS.
6. ALL CABLES SHALL MEET AMPACITY REQUIREMENTS OF THE NATIONAL ELECTRIC CODE. THE MINIMUM CABLE SIZE WITHIN THE CONTROL CENTER SHALL BE NO. 12 AWG.
7. REFER TO PLANS FOR NUMBER AND SIZE OF CIRCUIT BREAKERS.
8. REFER TO PLANS FOR NUMBER AND SIZE OF ELECTRODE GROUNDING CONDUCTOR WIRES REQUIRED.
9. CONTACTOR AND MAIN BREAKER TO BE SIZED PER STD T-# (2011) - LIGHTING CABINET LAYOUT.

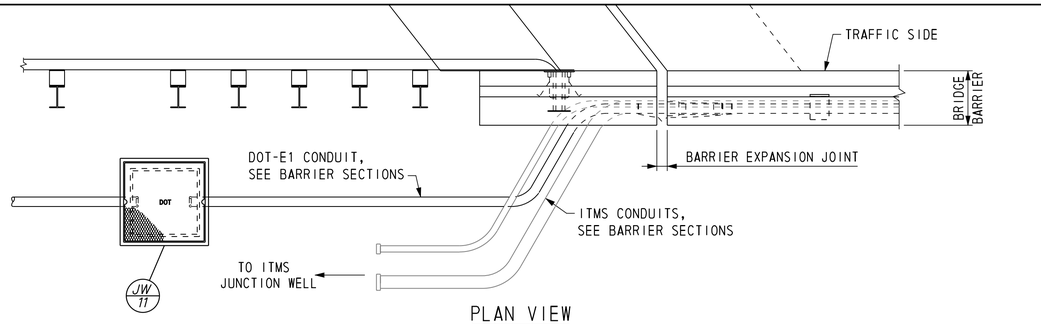


277/480 VOLT
LIGHTING CONTROL CENTER WIRING DIAGRAM
(FOR ROADWAY LIGHTING)

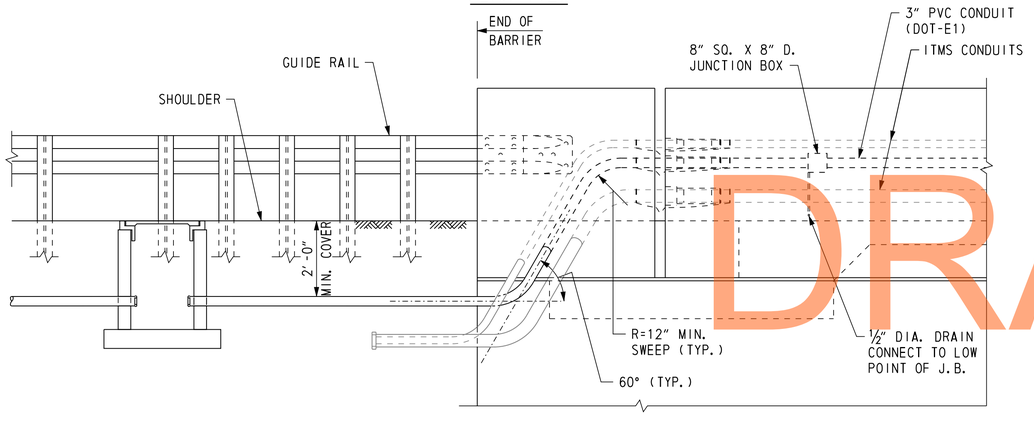
$FILE$
$DATE$
$USER$

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	LIGHTING PLAN LIGHTING DETAILS 4
				COUNTY NEW CASTLE	DESIGNED BY: A. AGGARWAL	SHEET NO. 1028
					CHECKED BY: D. L. BAKER	TOTAL SHTS. 1256

LI-29



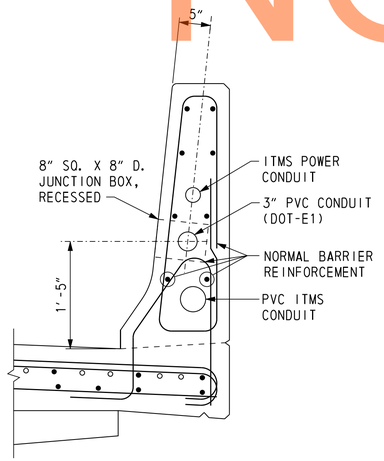
PLAN VIEW



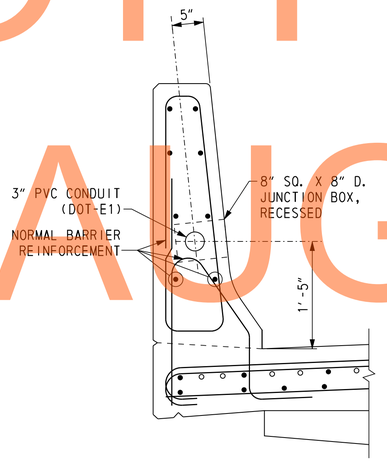
ELEVATION

CONDUIT DETAILS AT ENDS OF BRIDGE 1-470N AND 1-477S&N

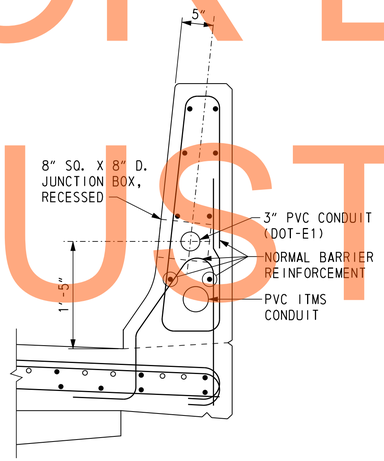
(REFER TO DWGS. LI-03, LI-08 AND LI-24)
NOT TO SCALE



3" DOT-E AND ITMS CONDUITS
IN BRIDGE 1-470N BARRIER TYPICAL



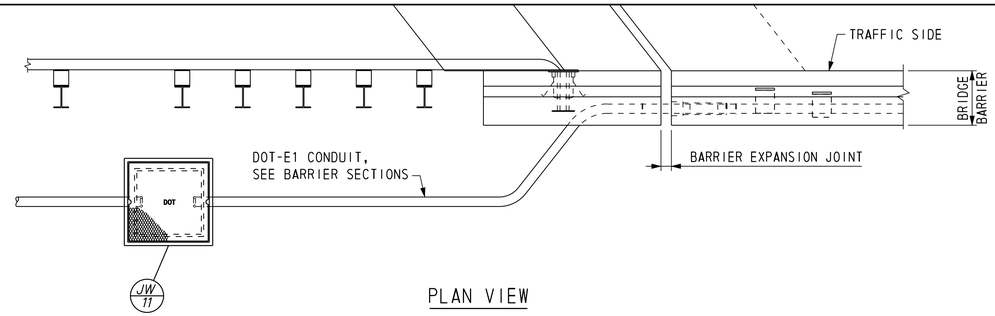
3" DOT-E AND ITMS CONDUITS
IN BRIDGE 1-477S BARRIER TYPICAL



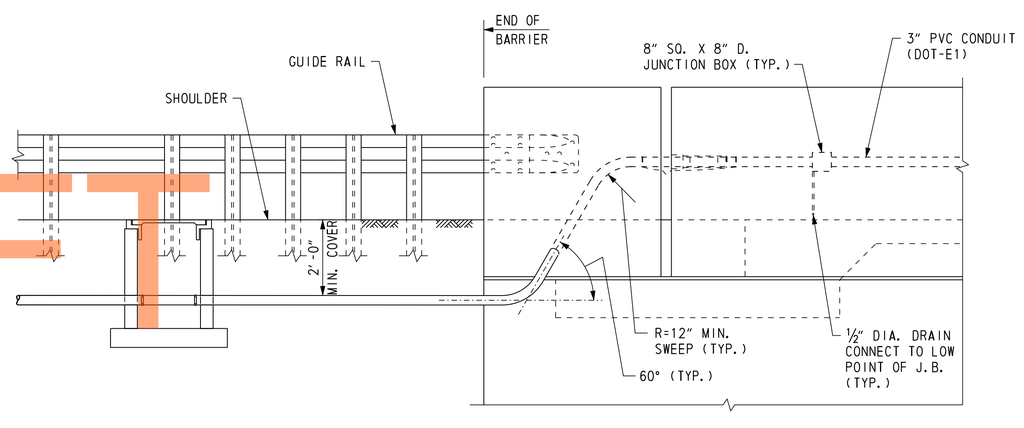
3" DOT-E AND ITMS CONDUITS
IN BRIDGE 1-477N BARRIER TYPICAL

CONDUIT LOCATIONS IN BRIDGE BARRIER SECTIONS

SCALE: 1" = 1'-0"



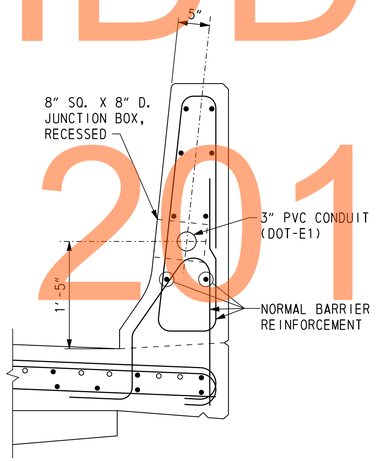
PLAN VIEW



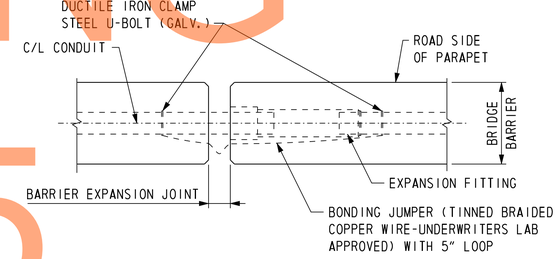
ELEVATION

CONDUIT DETAILS AT ENDS OF BRIDGE 1-479

NOT TO SCALE



3" DOT-E AND 3" TOLL-E CONDUITS
IN BRIDGE 1-479 BARRIER TYPICAL



EXPANSION JOINT FOR CONDUIT IN BARRIER

NOT TO SCALE

NOTES:

1. CONDUIT TO EXIT BARRIER ON OUTSIDE OF GUIDE RAIL POST LINE TO AVOID DAMAGE TO CONDUIT.
2. CONDUITS MUST BE STAGGERED AND AS WIDELY SPACED AS PRACTICAL.
3. JUNCTION BOXES IN BARRIERS SHALL BE HEAVY DUTY, DUST TIGHT AND RAIN TIGHT EQUAL TO COOPER CROUSE HINDS 'WJFB' SERIES
4. JUNCTION BOXES SHALL BE INSTALLED FLUSH WITH THE FACE OF BARRIER.
5. CONDUITS, CONDUIT EXPANSION JOINTS AND JUNCTION BOXES IN BARRIER WILL BE PROVIDED AND INSTALLED BY STRUCTURE CONTRACTOR. LIGHTING/ ELECTRICAL CONTRACTOR TO COORDINATE WITH BRIDGE STRUCTURE CONTRACTOR FOR TRANSITION OF UNDERGROUND CONDUIT TO BARRIER'S EMBEDDED CONDUITS.
6. BRIDGE STRUCTURE CONTRACTOR TO BROVIDE EXPANSION JOINTS AS REQUIRED.

$FILE$
$DATE$
$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: A. AGGARWAL	
CHECKED BY: D. L. BAKER	

LIGHTING PLAN
LIGHTING DETAILS 5

LI-30	
SHEET NO.	1029
TOTAL SHTS.	1256

PANELBOARD - SPUR ROAD LIGHTING CONTROL CENTER (TYPE 'R' LC-03)

277/480V
3 PHASE, 4 WIRE + GND
200 AMP M.C.B.

600 AMP BUS
200 AMP 3P CONTACTOR
LUMINAIRE VOLTAGE: 277 VOLTS

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
1	LST-37	0.3	1.2	A/277	3	100A	20A	1-250W HPS
3	LST-36	0.3	1.2	B/277				1-250W HPS
5	(NO LOAD)	-	-	C/277				
7	LST-45, LST-48, LST-51	1.0	3.6	A/277	3	100A	20A	3-250W HPS
9	LST-47, LST-50	0.7	2.4	B/277				2-250W HPS
11	LST-46, LST-49	0.7	2.4	C/277				2-250W HPS
13					3	100A	20A	
15	SPARE							
17								
19	SPACE							
21	SPACE							
23	SPACE							

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
2	LST-38, LST-41, LST-44	0.9	3	1/277	3	20A	20A	
4	LST-39, LST-42	0.6	1	1/277				
6	LST-40, LST-43	0.6	2	1/277				
8	LST-52	0.3	1	1/277	3	20A	20A	
10	LST-53	0.3	1	1/277				
12	(NO LOAD)	-	1	1/277				
14					3	20A	20A	
16	SPARE							
18								
20	SPACE							
22	SPACE							
24	SPACE							

PANELBOARD - ARMSTRONG CORNER ROAD LIGHTING CONTROL CENTER (TYPE 'R' LC-04)

277/480V
3 PHASE, 4 WIRE + GND
200 AMP M.C.B.

600 AMP BUS
200 AMP 3P CONTACTOR
LUMINAIRE VOLTAGE: 277 VOLTS

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
1	LST-65	0.3	1.2	A/277	3	100A	20A	1-250W HPS
3	LST-64	0.3	1.2	B/277				1-250W HPS
5	LST-63	0.3	1.2	C/277				1-250W HPS
7	LST-66, LST-69	0.7	2.4	A/277	3	100A	20A	2-250W HPS
9	LST-67, LST-70	0.7	2.4	B/277				2-250W HPS
11	LST-68	0.7	1.2	C/277				1-250W HPS
13					3	100A	20A	
15	SPARE							
17								
19	SPACE							
21	SPACE							
23	SPACE							

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
2	LST-54, LST-57	0.7	2.4	A/277	3	100A	20A	2-250W HPS
4	LST-56	0.3	1.2	B/277				1-250W HPS
6	LST-55	0.3	1.2	C/277				1-250W HPS
8	LST-58, LST-61	0.7	2.4	A/277	3	100A	20A	2-250W HPS
10	LST-59, LST-62	0.7	2.4	B/277				1-250W HPS
12	LST-60	0.3	1.2	C/277				1-250W HPS
14					3	100A	20A	
16	SPARE							
18								
20	SPACE							
22	SPACE							
24	SPACE							

NOTES:

1. PANELBOARD SHALL HAVE A MINIMUM SIZE OF 24 SPACES TO ACCOMMODATE FUTURE USE.
2. ALL LIGHTING CONTROL CENTER PANELBOARDS SHALL HAVE BOLT-ON CIRCUIT BREAKERS.

$FILE$
$DATE$
$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: A. AGGARWAL
NEW CASTLE	CHECKED BY: D.L. BAKER

LIGHTING PLAN
LIGHTING SCHEDULES 1

LI-31
SHEET NO. 1030
TOTAL SHTS. 1256

PANELBOARD - CONNECTOR RD/SUMMIT BRIDGE RD INTERSECTION NW CORNER - LIGHTING CONTROL CENTER (TYPE 'R' LC-05)

277/480V
3 PHASE, 4 WIRE + GND
200 AMP M.C.B.

600 AMP BUS
200 AMP 3P CONTACTOR
LUMINAIRE VOLTAGE: 277 VOLTS

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
1	LST-106, LST-109, LST-112, LST-115	1.3	4.8	A/277	3	100A	20A	4-250W HPS
3	LST-107, LST-110, LST-113, LST-116	1.3	4.8	B/277				4-250W HPS
5	LST-108, LST-111, LST-114	1.0	3.6	C/277				3-250W HPS
7					3	100A	20A	
9	SPARE							
11								
13	SPACE							
15	SPACE							
17	SPACE							
19	SPACE							
21	SPACE							
23	SPACE							

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
2	LST-80, LST-83, LST-86	1.0	3.6	1/277	3	100A	20A	3-250W HPS
4	LST-81, LST-84, LST87	1.0	3.6	1/120				3-250W HPS
6	LST-82, LST-85	1.0	2.4	1/120				3-250W HPS
8					3	100A	20A	
10	SPARE							
12								
14	SPACE							
16	SPACE							
18	SPACE							
20	SPACE							
22	SPACE							
24	SPACE							

PANELBOARD - CONNECTOR RD/SUMMIT BRIDGE RD INTERSECTION SW CORNER - LIGHTING CONTROL CENTER (TYPE 'M' LC-06)

120/240V
SINGLE PHASE, 3 WIRE + GND
100 AMP M.C.B.

200 AMP BUS
100 AMP 2P CONTACTOR
LUMINAIRE VOLTAGE : 120 VOLTS

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
1	LST-95	0.2	1.6	A/120	2	100A	20A	CONTRACT T201011301 LIGHT POLE
3	LST-131	0.4	3.3	B/120				CONTRACT T201011301 LIGHT POLE
5	LST-96	0.2	1.6	A/120	2	100A	20A	CONTRACT T201011301 LIGHT POLE
7	LST-136	0.2	1.6	B/120				CONTRACT T201011301 LIGHT POLE
9	LST-97, LST-99, LST-90A, WP-4	0.85	7.0	A/120	2	100A	20A	3-150W HPS 1-200W HPS
11	LST-98, LST-100, LST-89, WP-3	0.85	7.0	B/120				3-150W HPS 1-200W HPS
13	SPARE				2	100A	20A	
15								
17	SPACE							
19	SPACE							
21	SPACE							
23	SPACE							

CKT. NO.	EQUIPMENT SERVED	CONNECTED LOAD KW	CONNECTED LOAD AMPS	PHASE AND VOLTS	BRANCH CIRCUIT BREAKERS NUMBER OF POLES	BRANCH CIRCUIT BREAKERS FRAME SIZE	BRANCH CIRCUIT BREAKERS TRIP SIZE	REMARKS
2	LST-133, LST-135	0.4	3.3	A/120	2	100A	20A	CONTRACT T201011301 LIGHT POLE
4	LST-132, LST-134	0.4	1.6	B/120				CONTRACT T201011301 LIGHT POLE
6	LST-94, LST-92, LST-90, LST-71, LST-73, LST-74, WP-1	1.375	11.4	A/120	2	100A	20A	6-150W HPS 1-200W HPS
8	LST-93, LST-91, WP-2, LST-88, LST-72	1.05	9.0	B/120				4-150W HPS 1-200W HPS
10	SPARE				2	100A	20A	
12								
14	SPACE							
16	SPACE							
18	SPACE							
20	SPACE							
22	SPACE							
24	SPACE							

NOTES:

1. PANELBOARD SHALL HAVE A MINIMUM SIZE OF 24 SPACES TO ACCOMMODATE FUTURE USE.
2. ALL LIGHTING CONTROL CENTER PANELBOARDS SHALL HAVE BOLT-ON CIRCUIT BREAKERS.

$FILE$
$DATE$
$USER$

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: A. AGGARWAL
NEW CASTLE	CHECKED BY: D. L. BAKER

LIGHTING PLAN
LIGHTING SCHEDULES 2

LI-32
SHEET NO. 1031
TOTAL SHTS. 1256