

TRAFFIC SIGNAL SCHEDULE OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0021		
80300100	LOCATING UNDERGROUND CABLE	FOOT	100	100		
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	15	15		
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1655	1655		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1318	1318		
87701330	STEEL MAST ARM ASSEMBLY AND POLE, 60 FT. (SPECIAL)	EACH	1	1		
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21	21		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5	5		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4	4		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	4		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4	4		
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	9	9		
88600600	DETECTOR LOOP REPLACEMENT	FOOT	1652	1652		
89502200	MODIFY EXISTING CONTROLLER	EACH	1	1		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1	1		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	537	537		
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	3269	3269		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1		
X0325592	REMOVE AND REPLACE STONE RIPRAP	CU YD	20	20		

TRAFFIC SIGNALS LEGEND

- PVCC POLYVINYL CHLORIDE CONDUIT
- EXISTING SIGNAL HEAD
- EXISTING TRAFFIC SIGNAL MAST ARM
- EXISTING HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING DETECTOR LOOP
- EXISTING CONTROLLER
- EXISTING STREET NAME SIGN/TRAFFIC SIGN
- EXISTING SERVICE INSTALLATION
- EXISTING CONDUIT
- OR
- PROPOSED SIGNAL HEAD WITH BACKPLATE, MAST ARM MOUNTED
- PROPOSED DETECTOR LOOP
- PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED
- PROPOSED STREET NAME SIGN/TRAFFIC SIGN
- PROPOSED SIGNAL

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 143 AND IL 159

LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. SEB CCO	6	6 X 6	6	373.7	3.1
2. SEB CCO	6	6 X 6	6	365.3	2.9
3. SEB LT CD	1	6' X 50'-0"	3-6-3	839.2	2.8
4. SEB THRU CD	6	6' X 50'-0"	3-6-3	831.1	2.6
5. SEB RT CD	6	6' X 20'-0"	3-6-3	382.2	1.7
6. NEB CCO	4	6 X 6	6	NA	NA
7. NEB THRU/LT CD	4	6' X 50'-0"	3-6-3	808.9	2.1
8. NEB RT CD	4	6' X 20'-0"	3-6-3	360	1.2
9. NWB CCO	2	6 X 6	6	NA	NA
10. NWB CCO	2	6 X 6	6	NA	NA
11. NWB LT CD	5	6' X 50'-0"	3-6-3	821.4	2.4
12. NWB THRU CD	2	6' X 50'-0"	3-6-3	818.3	2.3
13. NWB RT CD	2	6' X 40'-0"	3-6-3	665.5	2
14. SWB CCO	3	6 X 6	6	NA	NA
15. SWB THRU/LT CD	3	6' X 50'-0"	3-6-3	841.9	2.9
16. SWB RT CD	3	6' X 45'-0"	3-6-3	765.3	2.7

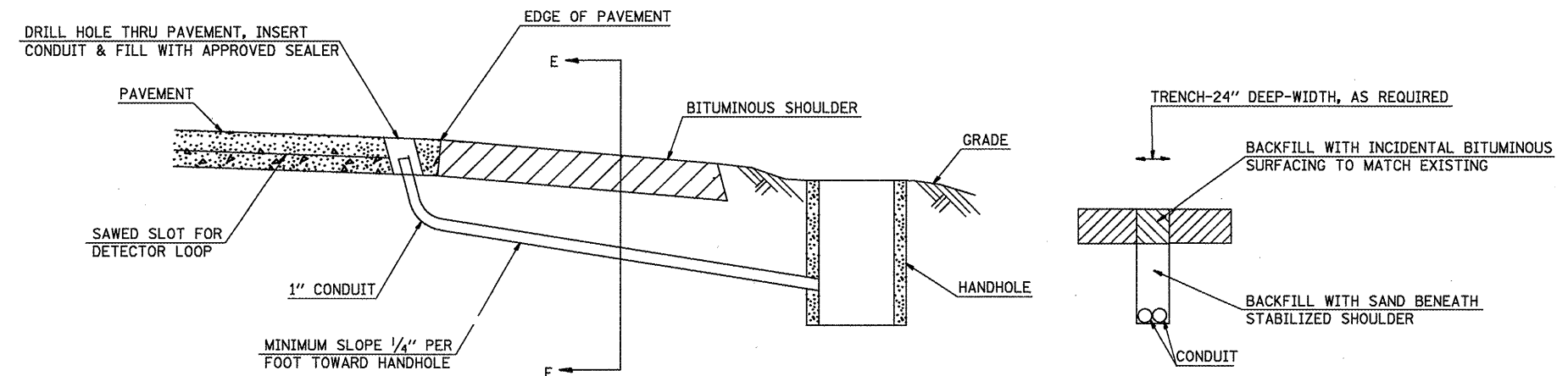
THE ABOVE VALUES ARE CALCULATED FOR COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

STANDARDS

- 720016-02 873001-02 877002-01
- 878001-08 880006-01 886001-01
- 886006-01

TRAFFIC SIGNAL GENERAL NOTES

- ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL HAVE 12" SECTIONS. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SEIZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
- BACKPLATES SHALL BE ABS PLASTIC.
- THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF THE CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
- ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON RING TONGUE CONNECTORS.
- THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
- DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN A HANDHOLE PER SECTION 873 OF THE STANDARD SPECIFICATIONS. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD FILLED WITH NON-HARDENING EPOXY FILLER. ROSIN-CORE SOLDER SHALL BE USED.
- THE HANDHOLE COVER CAST IN PLACE LEGEND SHALL READ "TRAFFIC SIGNALS". SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
- DETECTOR LOOPS SHALL BE SAWED INTO THE PAVEMENT AFTER MILLING AND PRIOR TO INSTALLING THE FINAL HMA SURFACE.



* LIMITS OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK (SPECIAL)"

DETAIL A
TRENCH AND BACKFILL FOR ELECTRICAL WORK (SPECIAL)
(NO SCALE)

SEC. E-E