

ENGINEER:
ECON OPPORTUNITIES, INC.
 230 N 5TH ST
 READING, PA 19601-3309
 610-898-0252

CONSULTANTS

**CITY OF READING
 STREET LIGHTS
 SUMMIT CHASE
 DRIVE**

MARK	DATE	DESCRIPTION
0	10/29/18	ISSUED FOR BIDS

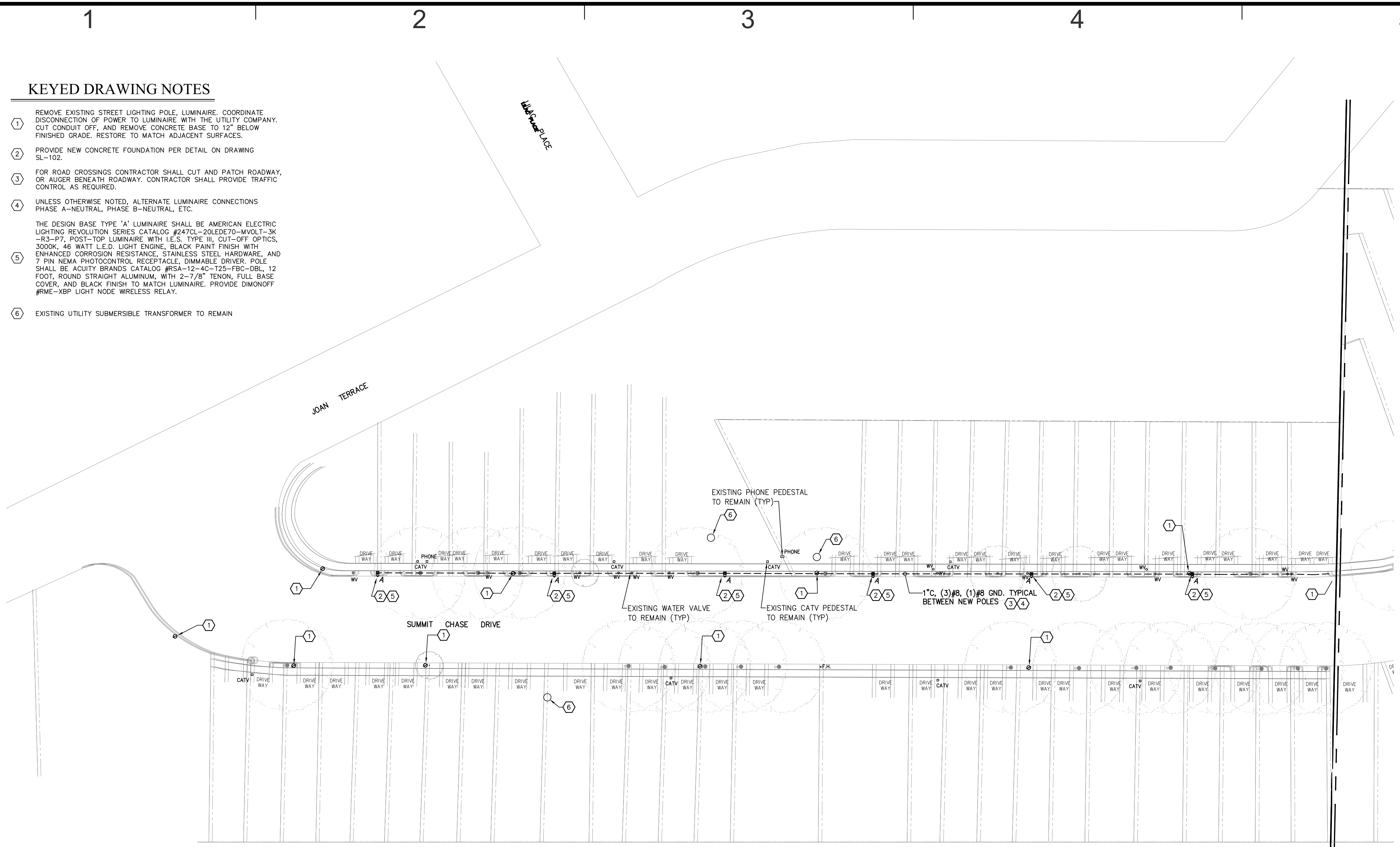
PROJECT NO: 15-1169-0108
 MODEL FILE:
 DRAWN BY: SBG
 CHK'D BY: SG
 COPYRIGHT

SHEET TITLE
**STREET LIGHTING
 PLAN**

SL-100

KEYED DRAWING NOTES

- ① REMOVE EXISTING STREET LIGHTING POLE, LUMINAIRE, COORDINATE DISCONNECTION OF POWER TO LUMINAIRE WITH THE UTILITY COMPANY. CUT CONDUIT OFF, AND REMOVE CONCRETE BASE TO 12" BELOW FINISHED GRADE. RESTORE TO MATCH ADJACENT SURFACES.
 - ② PROVIDE NEW CONCRETE FOUNDATION PER DETAIL ON DRAWING SL-102.
 - ③ FOR ROAD CROSSINGS CONTRACTOR SHALL CUT AND PATCH ROADWAY, OR AUGER BENEATH ROADWAY. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED.
 - ④ UNLESS OTHERWISE NOTED, ALTERNATE LUMINAIRE CONNECTIONS PHASE A-NEUTRAL, PHASE B-NEUTRAL, ETC.
- THE DESIGN BASE TYPE "A" LUMINAIRE SHALL BE AMERICAN ELECTRIC LIGHTING REVOLUTION SERIES CATALOG #247CL-20LEDE70-MVOLT-3K-R3-P7, POST-TOP LUMINAIRE WITH I.E.S. TYPE III, CUT-OFF OPTICS, 3000K, 46 WATT L.E.D. LIGHT ENGINE, BLACK PAINT FINISH WITH ENHANCED CORROSION RESISTANCE, STAINLESS STEEL HARDWARE, AND 7 PIN NEMA PHOTOCONTROL RECEPTACLE, DIMMABLE DRIVER. POLE SHALL BE ACQUITY BRANDS CATALOG #RSA-12-40-125-FBC-DBL, 12 FOOT, ROUND STRAIGHT ALUMINUM, WITH 2-7/8" TENON, FULL BASE COVER, AND BLACK FINISH TO MATCH LUMINAIRE. PROVIDE DIMONOFF #RME-XBP LIGHT NODE WIRELESS RELAY.
- ⑤
 - ⑥ EXISTING UTILITY SUBMERSIBLE TRANSFORMER TO REMAIN

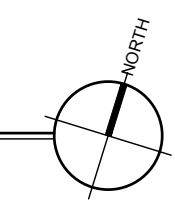


NOTE:
 LUMINAIRES ARE SHOWN TWICE THEIR ACTUAL SIZE FOR CLARITY.

REFER TO DRAWING SL-101 FOR CONTINUATION

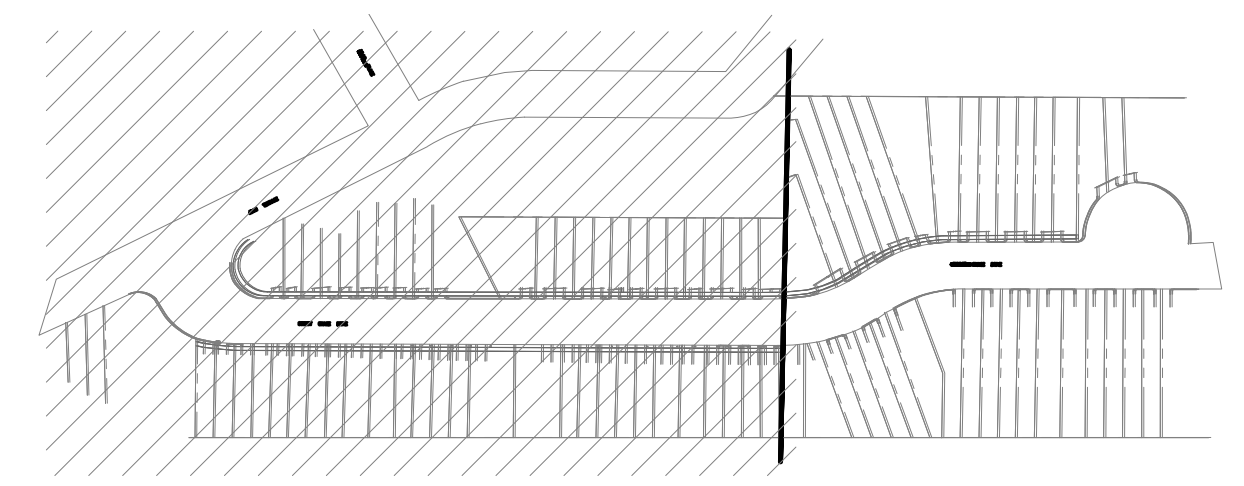
STREET LIGHTING PLAN

SCALE: 1"=30'-0"



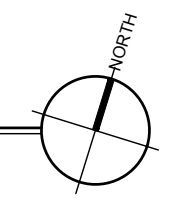
ALTERNATE MANUFACTURER

1. AN ACCEPTABLE ALTERNATE MANUFACTURER SHALL BE CRYSTAL LIGHTING #SL-CLP-TC-30-MV-BLK-WC-NL-T3 LUMINAIRE ON #RSA-12-40D-7G POLE. THE LIGHTING CONTROL SHALL BE DIMONOFF #RTM-XBX LITE NODE WIRELESS RELAY AND SHALL BE MOUNTED INTERNALLY WITHIN THE LUMINAIRE HOUSING.



KEY PLAN

SCALE: 1"=200'-0"



ENGINEER:
ECON OPPORTUNITIES, INC.
 230 N 5TH ST
 READING, PA 19601-3309
 610-898-0252

KEYED DRAWING NOTES

- ① REMOVE EXISTING STREET LIGHTING POLE, LUMINAIRE. COORDINATE DISCONNECTION OF POWER TO LUMINAIRE WITH THE UTILITY COMPANY. CUT CONDUIT OFF, AND REMOVE CONCRETE BASE TO 12" BELOW FINISHED GRADE. RESTORE TO MATCH ADJACENT SURFACES.
- ② PROVIDE NEW CONCRETE FOUNDATION PER DETAIL ON DRAWING SL-102.
- ③ FOR ROAD CROSSINGS CONTRACTOR SHALL CUT AND PATCH ROADWAY, OR AUGER BENEATH ROADWAY. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED.
- ④ UNLESS OTHERWISE NOTED, ALTERNATE LUMINAIRE CONNECTIONS PHASE A-NEUTRAL, PHASE B-NEUTRAL, ETC.
- ⑤ THE DESIGN BASE TYPE 'A' LUMINAIRE SHALL BE AMERICAN ELECTRIC LIGHTING REVOLUTION SERIES CATALOG #247CL-20LEDE70-MVOLT-3K-R3-P7, POST-TOP LUMINAIRE WITH I.E.S. TYPE III, CUT-OFF OPTICS, 3000K, 46 WATT L.E.D. LIGHT ENGINE, BLACK PAINT FINISH WITH ENHANCED CORROSION RESISTANCE, STAINLESS STEEL HARDWARE, AND 7 PIN NEMA PHOTOCONTROL RECEPTACLE, DIMMABLE DRIVER. POLE SHALL BE ACUTY BRANDS CATALOG #RSA-12-4C-T25-FBC-DBL, 12 FOOT, ROUND STRAIGHT ALUMINUM, WITH 2-7/8" TENON, FULL BASE COVER, AND BLACK FINISH TO MATCH LUMINAIRE. PROVIDE DIMONOFF #RME-XBP LIGHT NODE WIRELESS RELAY.
- ⑥ EXISTING UTILITY SUBMERSIBLE TRANSFORMER TO REMAIN

ALTERNATE MANUFACTURER

- 1. AN ACCEPTABLE ALTERNATE MANUFACTURER SHALL BE CRYSTAL LIGHTING #SL-CLP-1C-30-MV-BLK-WC-NL-T3 LUMINAIRE ON #RSA-12-400-75 POLE. THE LIGHTING CONTROL SHALL BE DIMONOFF #RTM-XBx LITE NODE WIRELESS RELAY AND SHALL BE MOUNTED INTERNALLY WITHIN THE LUMINAIRE HOUSING.

CONSULTANTS

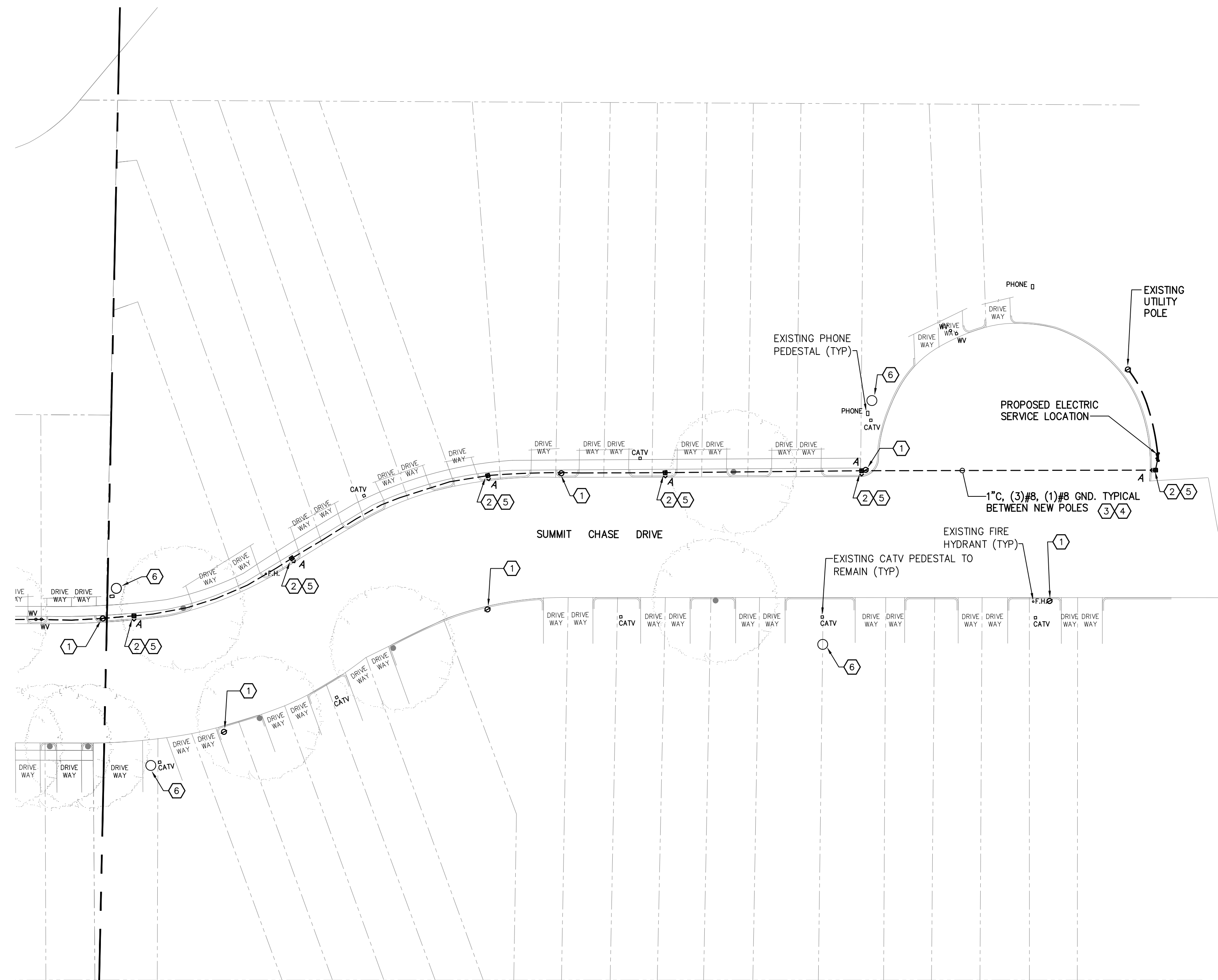
**CITY OF READING
 STREET LIGHTS
 SUMMIT CHASE
 DRIVE**

MARK	DATE	DESCRIPTION
0	10/29/18	ISSUED FOR BIDS

PROJECT NO: 15-1169-0108
 MODEL FILE:
 DRAWN BY: SBG
 CHK'D BY: SG
 COPYRIGHT

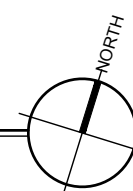
**SHEET TITLE
 STREET LIGHTING
 PLAN**

SL-101



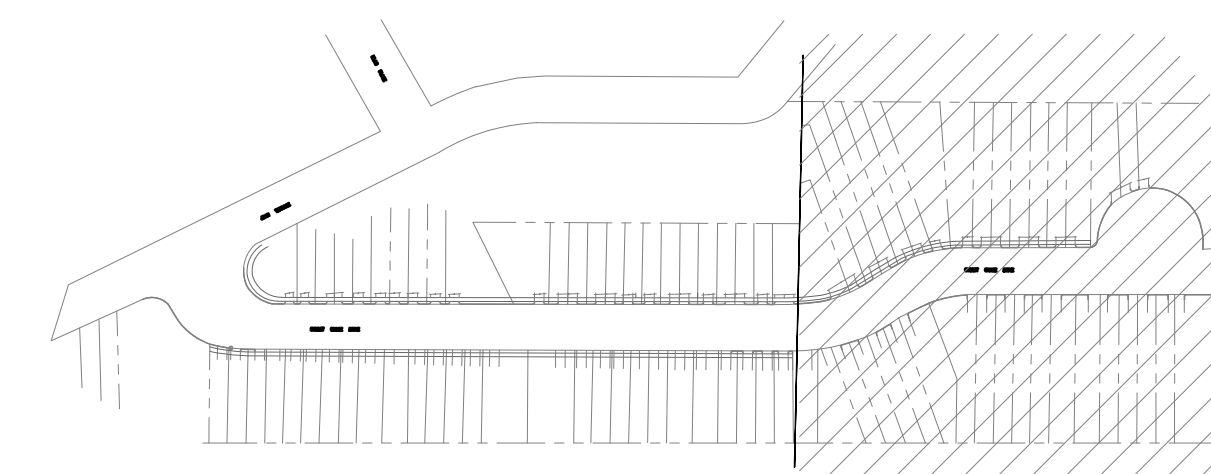
STREET LIGHTING PLAN

SCALE: 1"=30'-0"



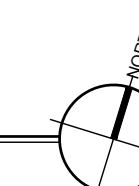
NOTE:
 LUMINAIRES ARE SHOWN TWICE THEIR ACTUAL SIZE FOR CLARITY.

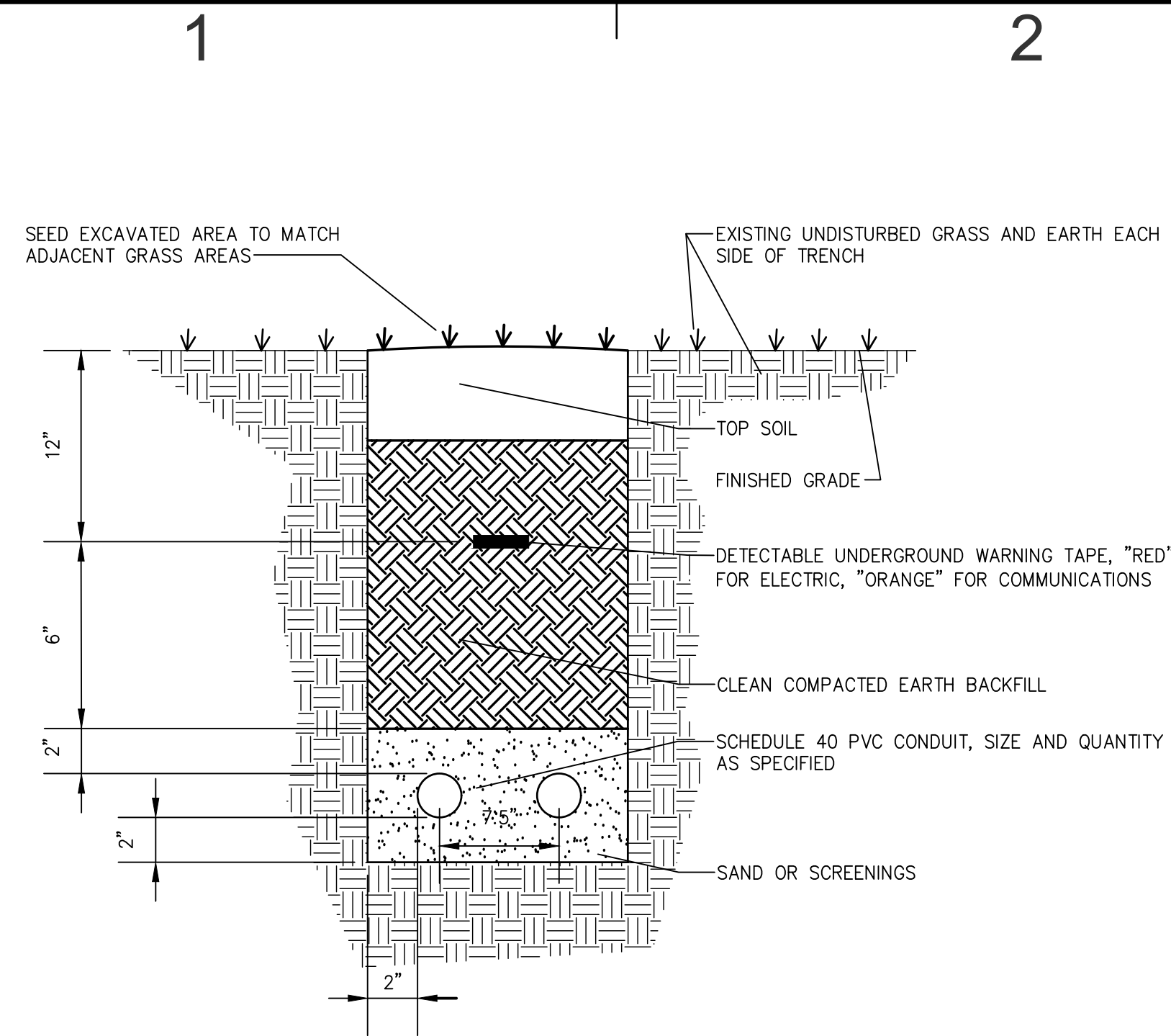
REFER TO DRAWING SL-100
 FOR CONTINUATION



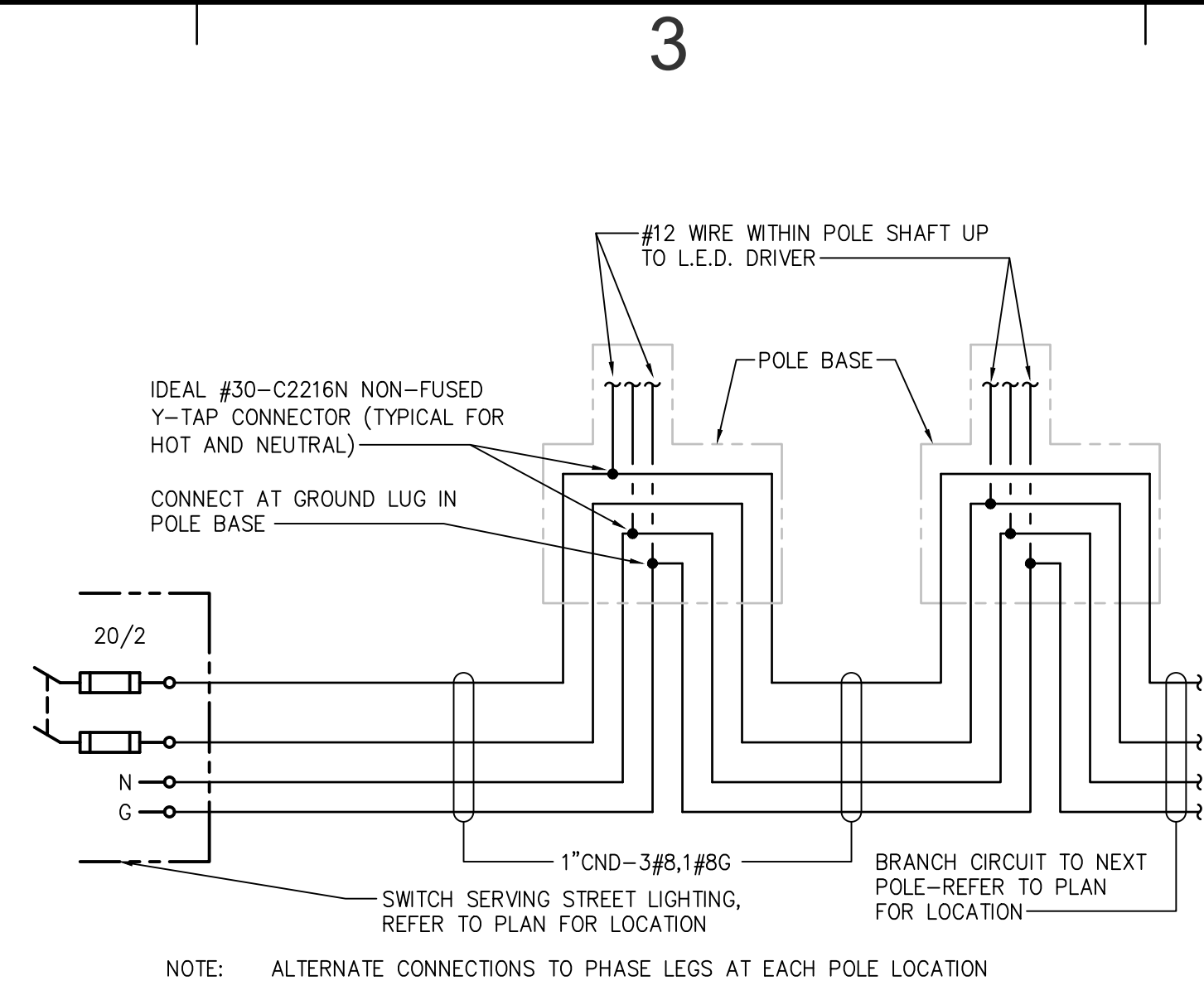
KEY PLAN

SCALE: 1"=200'-0"

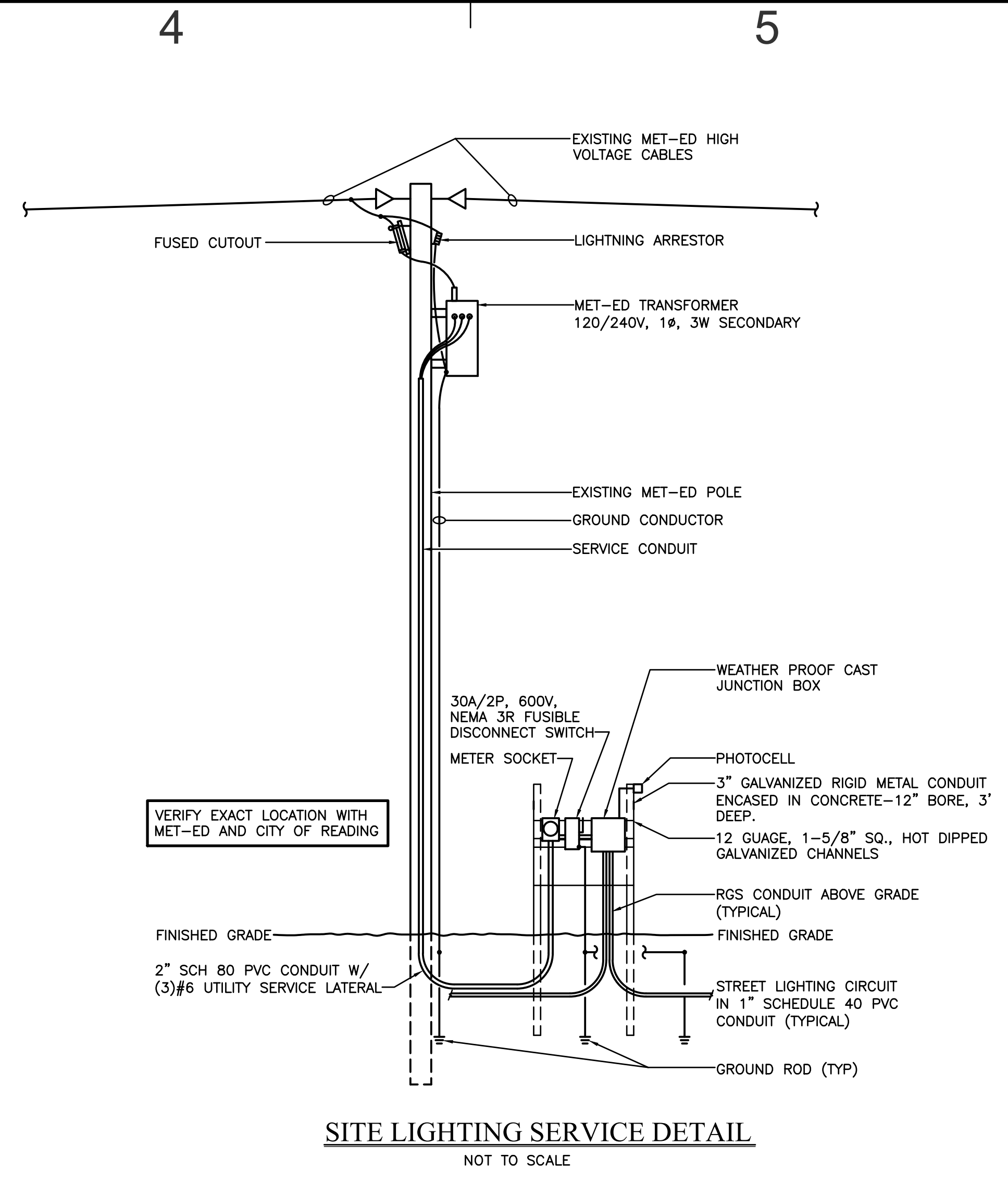




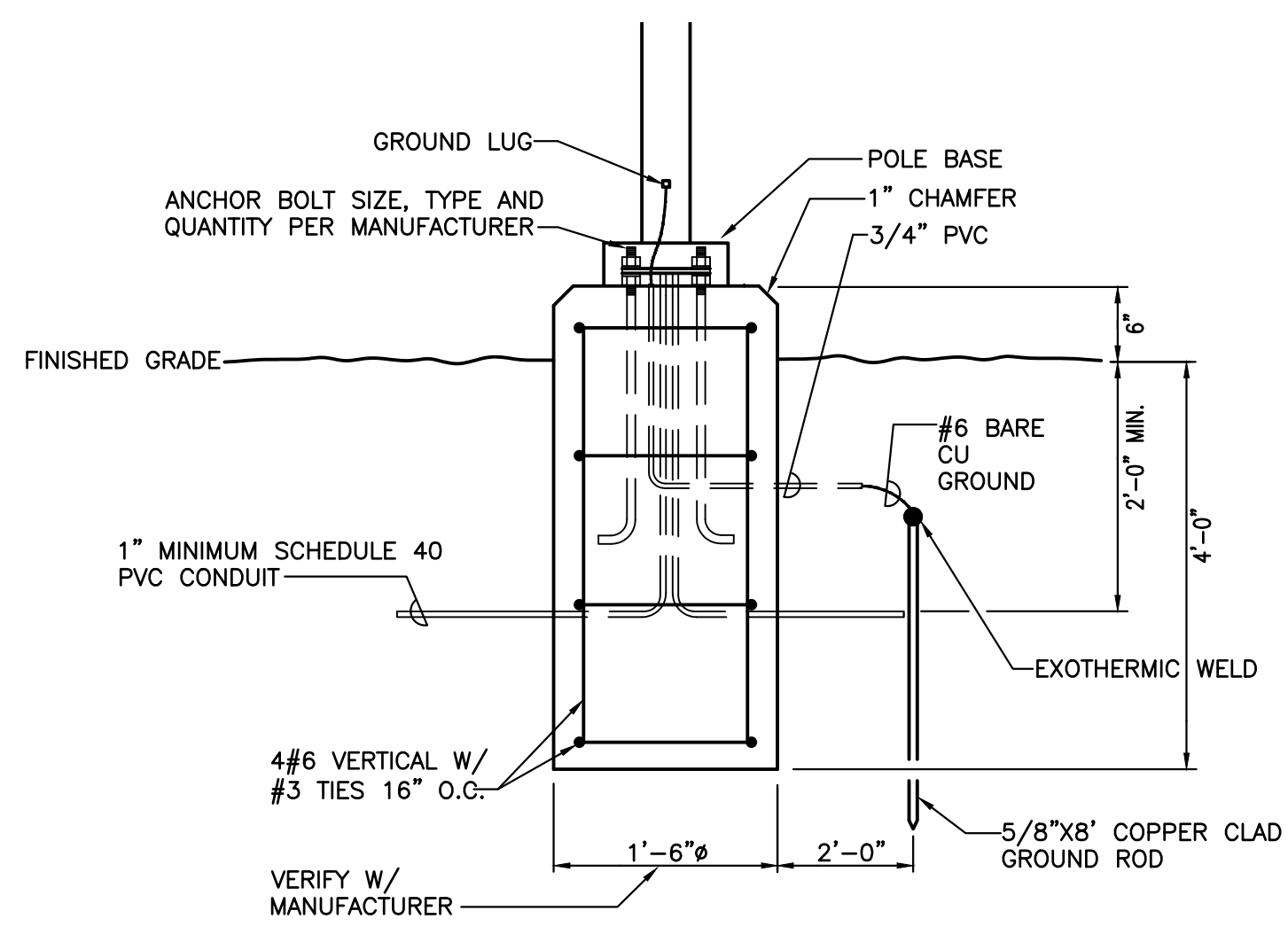
TYPICAL DIRECT BURIED CONDUIT DETAIL
NOT TO SCALE



STREET LIGHTING WIRING DIAGRAM
NOT TO SCALE



SITE LIGHTING SERVICE DETAIL
NOT TO SCALE



POLE BASE DETAIL
NOT TO SCALE

ELECTRICAL GENERAL NOTES

- THE FOLLOWING NOTES APPLY TO ALL DRAWINGS:
- ENTIRE INSTALLATION INCLUDING MATERIALS, EQUIPMENT AND WORKMANSHIP, SHALL CONFORM WITH THE LATEST ADDITION OF THE NATIONAL ELECTRIC CODE, WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS AND REGULATORY BODIES HAVING JURISDICTION OVER THIS WORK.
 - CONTRACTOR SHALL APPLY FOR ELECTRICAL SERVICE FOR THE PROJECT, PROVIDE SERVICE EQUIPMENT AND INSTALLATION IN ACCORDANCE WITH UTILITY CO. REQUIREMENTS AND THE APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE.
 - UNLESS OTHERWISE NOTED ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE PROVIDED WITH, AND HOUSED IN A NEMA 3R ENCLOSURE.
 - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE BEFORE PROCEEDING WITH THE WORK.
 - ALL BRANCH WIRING SHALL BE MINIMUM 2 #8 & 1 #10 GROUND. MINIMUM CONDUIT SIZE SHALL BE 1" SCHEDULE 40 PVC. USE RIGID GALVANIZED STEEL CONDUIT WHERE CONDUIT IS RUN EXPOSED ABOVE GRADE.
 - THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS AND SYSTEMS THAT EFFECT HIS BIDDING AND WORK, AND SHALL PROVIDE VALUE FOR THE SAME IN HIS BID.
 - THE CONTRACTOR SHALL CONFIRM THE LOCATIONS OF ALL UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES. VERIFY WITH PA-1-CALL BEFORE ANY DIGGING. E.C. IS RESPONSIBLE FOR ALL SAW CUTTING, EXCAVATION, BACKFILLING AND RESTORATION, AND AUGERING REQUIRED TO PERFORM HIS WORK.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FIELD CONDITIONS AT THE SITE AND NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH THE WORK.
 - THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING OF EXISTING CONSTRUCTION REQUIRED BY HIS WORK. ALL FINISHES SHALL MATCH EXISTING, WHETHER CONCRETE, BLACKTOP, OR GRASS. WHERE EQUIPMENT IS REMOVED, CONTRACTOR SHALL PATCH AND REFINISH AREA TO MATCH EXISTING. REPAIRED BLACKTOP AREAS SHALL BE HOT PATCHED AND SEALED. GRASS AREAS SHALL BE DRESSED WITH TOPSOIL AND SEED.
 - THE ELECTRICAL CONTRACTOR SHALL EFFECTIVELY PROTECT ALL MATERIALS AND EQUIPMENT FROM ENVIRONMENTAL AND PHYSICAL DAMAGE UNTIL FINAL ACCEPTANCE. CLOSE AND PROTECT ALL OPENINGS DURING CONSTRUCTION. PROVIDE NEW MATERIALS AND EQUIPMENT TO REPLACE ITEMS DAMAGED.
 - EXISTING ELECTRICAL EQUIPMENT THAT INTERFERES WITH THE NEW ARRANGEMENT SHALL BE REMOVED, REINSTALLED, RELOCATED, REROUTED, EXTENDED OR ABANDONED AS REQUIRED, TO SUIT THE NEW ARRANGEMENT.
 - SHOULD REMOVAL, RELOCATION, REROUTING OF ANOTHER TRADE'S WORK BE REQUIRED TO ACCOMMODATE ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THAT WORK AND SHALL PAY ALL REQUIRED COSTS. WORK SHALL BE PERFORMED BY MECHANICS SKILLED IN THE PARTICULAR TRADE INVOLVED.
 - NO OPEN PITS OR TRENCHES SHALL BE LEFT UNATTENDED. OPEN PITS AND TRENCHES MUST BE COVERED WHEN CONTRACTOR IS NOT ON SITE.
 - CONTRACTOR HAS THE OPTION TO USE DIRECTIONAL BORING TO INSTALL STREET LIGHTING CIRCUITS IN LIEU OF STANDARD EXCAVATION AND BACKFILL METHODS.
 - EXISTING LANDSCAPE AND HARD SURFACES DAMAGED SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED.
 - EXISTING ELECTRICAL WORK THAT IS TO REMAIN WHEN OTHER ELECTRICAL WORK IS TO BE MODIFIED OR REMOVED SHALL BE MAINTAINED ON A PERMANENT BASIS.
 - ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING INTEGRITY OF ALL STRUCTURAL ELEMENTS.
 - DIVISION 26 OR EC SHALL USED INTERCHANGEABLY AND SHALL INDICATE WORK INCLUDED UNDER THE ELECTRICAL CONTRACTORS SCOPE.
 - ALL EQUIPMENT REMOVED SHALL BE TURNED OVER TO OWNER NO LONGER REQUIRED. ALL MATERIALS NOT DESIRED BY OWNER SHALL BE REMOVED FROM SITE.
 - CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH OWNERS REPRESENTATIVE, AND OTHER TRADES.
 - PROVIDE A COMPLETE AND FULLY FUNCTIONAL WIRELESS CONTROL SYSTEM FOR SUMMIT CHASE DRIVE. THE LIGHTING CONTROL SYSTEM SHALL BE FULLY COMPATIBLE WITH THE DIMONOFF SYSTEM IN USE IN THE WYOMISSING PARK AREA OF THE CITY OF READING. IT IS ANTICIPATED THAT THE LUMINAIRES IN SUMMIT CHASE DRIVE WILL EVENTUALLY BE CONNECTED TO THE WYOMISSING PARK CONTROL SYSTEM.

American Revolution Full Cutoff LED Series 247CL

PRODUCT OVERVIEW

Features:

- Die-cast aluminum housing and hood for long-life performance
- Die-cast trigger latch (TL) and captive thumb screws option available for easy access to internal components
- Optical assembly designed for maximum performance, available in Type II, Type III and Type V
- Hinged hood and captive thumb screws provision afford quick, easy access to electrical and optical area for servicing
- Slipfitter with three set screws allows secure installation to pole sizes 2-3/8" or 3" O.D.
- Surge protection device (standard) exceeds ANSI C82.41 Category C1 criteria (surge tested at 10kV/5kA)
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 30°C ambient
- Rated L70, LED life greater than 100,000 hours at 25°C
- Replaces up to 150W HPS light source incumbent models
- LED electronic 0V-10V dimmable driver
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Applications:

- Streetscapes
- Walkways
- Pathways
- Parks

DIMENSIONS

Effective Projected Area (EPA)
The EPA for the American Revolution Series 247CL is 1.0 sq. ft.
P5 or P7 option total height is 24.9 (633).
Approx. Wt. = 36 lbs.

Note: Specifications subject to change without notice.
American Revolution Full Cutoff Series 247CL LED

DESIGN BASE STREET LIGHTING LUMINAIRE
NOT TO SCALE

ENGINEER:
ECON OPPORTUNITIES, INC.
230 N 5TH ST
READING, PA 19601-3309
610-898-0252

CONSULTANTS

**CITY OF READING
STREET LIGHTS
SUMMIT CHASE
DRIVE**

MARK	DATE	DESCRIPTION
0	10/29/18	ISSUED FOR BIDS

PROJECT NO: 15-1169-0108
MODEL FILE:
DRAWN BY: SBG
CHK'D BY: SG
COPYRIGHT

SHEET TITLE

**STREETLIGHTS
DETAILS**