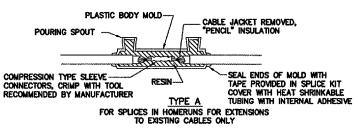
GENERAL ELECTRICAL NOTES:

- 1. ALL EXCAVATION SHALL BE DONE VERY CAREFULLY. EXCAVATION BY HAND DIGGING SHALL BE REQUIRED AROUND ALL EXISTING DUCT BANKS, SPLICE CANS, MANHOLES, AND EXISTING CABLES. MANY EXISTING ACTIVE UNDERGROUND CABLES, WHOSE EXACT LOCATIONS CANNOT BE DETERMINED, ARE FOUND IN THE PROJECT AREA. IN ORDER TO AVOID EXISTING UNDERGROUND CABLES, THE CONTRACTOR SHALL CONNECT A THUMPER TO ALL EXISTING CIRCUITS AFTER WHICH THEY SHALL BE STAKED IN ALL AREAS REQUIRING TRENCHING OR EXCAVATION. CONTRACTOR SHALL ALSO NOTE THAT LOW VOLTAGE, FAA CABLES ALSO RUN UNDERGROUND THROUGHOUT THESE AREAS. ANY CABLE DAMAGED SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- A MINIMUM OF 3 FEET OF SLACK SHALL BE PROVIDED IN THE CABLES AT EACH TRANSFORMER, CONNECTOR, OR SPLICE POINT. ALL CABLE SPLICES SHALL OCCUR IN MANHOLES, LIGHT WELLS OR SPLICE CANS, UNLESS NOTED OTHERWISE.
- 3. THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
- 4. ALL MANUFACTURERS FOR SUPPLYING AIRPORT LIGHTING EQUIPMENT SHALL APPEAR ON THE CURRENT FAA "APPROVED AIRPORT EQUIPMENT" LIST FOUND IN AC 150/5345-538. THE EQUIPMENT SHALL COMPLY WITH THE APPLICABLE CURRENT FAA ADVISORY CIRCULAR LISTED IN THE AF "APPROVED AIRPORT EQUIPMENT" LIST FOUND IN AC 150/5345-2 (AIRPORTS ELECTRONIC BULLETIN BOARD NUMBER 14).
- 5. THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM (INCLUDING FAA APPROVED EQUIPMENT) ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OR DIFFERENT MANUFACTURER) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
- 6. IF THE CONTRACTOR SELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT WHICH REQUIRES ADDITIONAL WRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC., BEYOND THAT SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, THEN THE COST FOR THE ADDITIONAL ITEMS SHALL BE INCLUDED
- 7. THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH THE EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- 8. WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC. OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES, STYLES,
- ALL CONCRETE FOR ELECTRICAL EQUIPMENT SHALL COMPLY WITH SPECIFICATION 610-STRUCTURAL PC CONCRETE 3500 PSI AT 28 DAYS, AIR ENTRAINED CONCRETE MIX SHALL BE USED.
- 10. BASE MOUNTED BREAKABLE COUPLINGS SHALL NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED UP HOLES SHALL NOT BE ACCEPTABLE. IT SHALL HAVE A 1/4" DIAMETER OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE CONNECTOR INTO THE BASE.
- 11. THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1 $1/2^{\circ}$ above the edge of the cover in the case of a base mounted coupling.
- 12. ALL PERMANENT CABLE SPLICES SHALL OCCUR IN MANHOLES, LIGHT WELLS, OR SPLICE CANS, UNLESS
- 13. MIMIC PANEL COLORS: TAXIWAY F-2 CIRCUIT = LIME AND RUNWAY 5-23 CIRCUIT = WHITE.



HEAT SHRINKABLE TUBING MITH INTERNAL ADHESIVE, ADDITIONAL ADHESIVE COMPOUND FILLER 2"TYP. AFTER SHRINKING ∠PLUG END UNDERGROUND CABLE RECEPTACLE END-SPEC. L-824, TYPICAL TYPE B

FOR SPLICES FOR USE AT JUNCTION OF

HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE RECEPTACLE END-2"TYP. ADDITIONAL ADHESIVE COMPOUND FILLER -Plug end FACTORY MOLDED ISFORMER LEADS AFTER SHRINKING RECEPTACLE END L-823 PLUG END COMPOUND FILLER

TYPE C FOR SPLICES AT RUNWAY LIGHTS

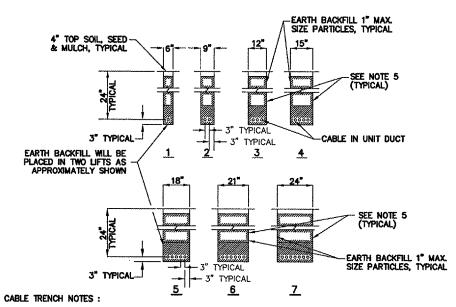
NOTES :

SEE LIGHTING LAYOUT SHEET(S) FOR SPLICE TYPE INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE

> CABLE SPLICES (NOT TO SCALE)

G:\AIRPORT\A04T015\LIGHTING2.DWG\ 1=1 11~20~04 QUAD CITY INTERNATIONAL AIRPORT RUNWAY 5-23 OVERLAY, PHASE I

ILL. MU-3374 SHEET 27 OF 63



1. DETAIL NUMBERS INDICATE NO. OF CABLES.

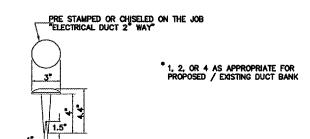
2. TRENCHES WITH MORE THAN 7 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE: IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.

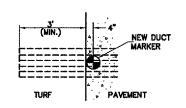
4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH. RETURFING MATERIALS AND RATES MAY BE SHOWN ON THE PLANS.

3. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.

5. INSTALL YELLOW PLASTIC WARNING RIBBON IN TRENCH 9" ABOVE CABLES (TYPICAL ALL TRENCHES).

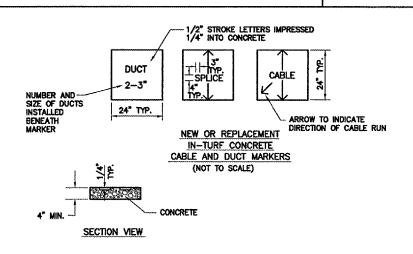
CABLE TRENCHES (NOT TO SCALE)





IN-PAVEMENT BRASS DUCT MARKER DETAIL

PAVING CONTRACTOR SHALL INSTALL NEW BRASS DUCT MARKERS IN THE PROPOSED PAVEMENT AT ALL LOCATIONS WHERE THE PROPOSED PAVEMENT CROSSES EXISTING OR PROPOSED ELECTRICAL DUCTS. COST OF DUCT MARKERS SHALL BE INCLUDED IN THE 401 AND / OR 501 CONTRACT UNIT PRICES.



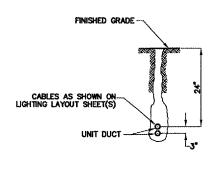
NOTES:

- New Markers are not required for this project. The contractor shall be required to adjust the Elevation of Existing Markers and / or replace existing Markers Damaged During Construction.
 COST OF CONCRETE MARKERS IS INCIDENTAL TO THE ASSOCIATED ITEMS OF DUCT
- 3. EDGE EXPOSED CONCRETE WITH A 1/4" RADIUS TOOL.
- 4. WHERE ADDITIONAL SPACE TO FIT THE LEGEND IS REQUIRED, SOME OF THE
- FOLLOWING METHODS SHALL BE EMPLOYED.

 A. REDUCE LETTER SIZE TO 3" HIGH, 2" WIDE

 B. INCREASE THE MARKER SIZE TO 30" X 30" MAX.

 C. PROVIDE ADDITIONAL MARKERS PLACED SIDE BY SIDE



PLOWED CABLE (NOT TO SCALE)