



DULUTH INTERNATIONAL AIRPORT

**NORTH
BUSINESS
DEVELOPMENT
AREA**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature *Darren K. Christopher*

Typed Name DARREN K. CHRISTOPHER

Date 08/18/2009 Reg. No. 45052

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 08-18-2009

REVIEWED BY: MLS

DRAWN BY: JKE

DESIGNED BY: DKC

AEP PROJECT NUMBER

214-1882-077

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SHEET TITLE

**ELECTRICAL
DETAILS**

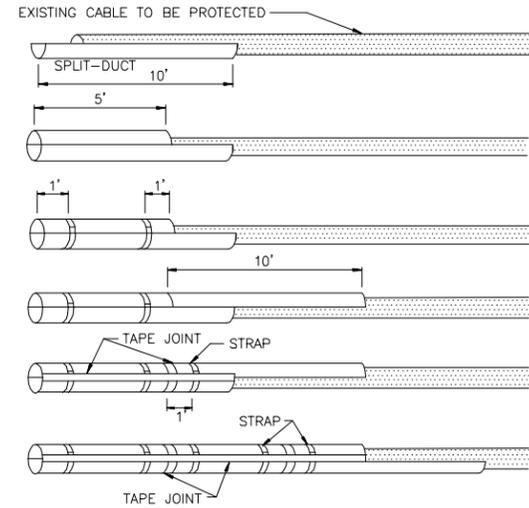
SHEET NUMBER

E305

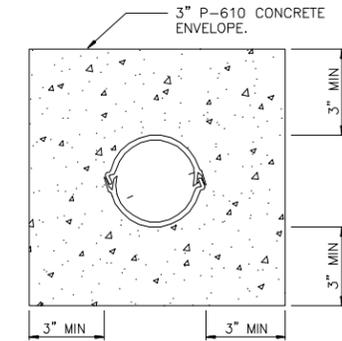
**BID
DOCUMENTS**

**RECOMMENDED SPLIT DUCT
INSTALLATION PROCEDURE:**

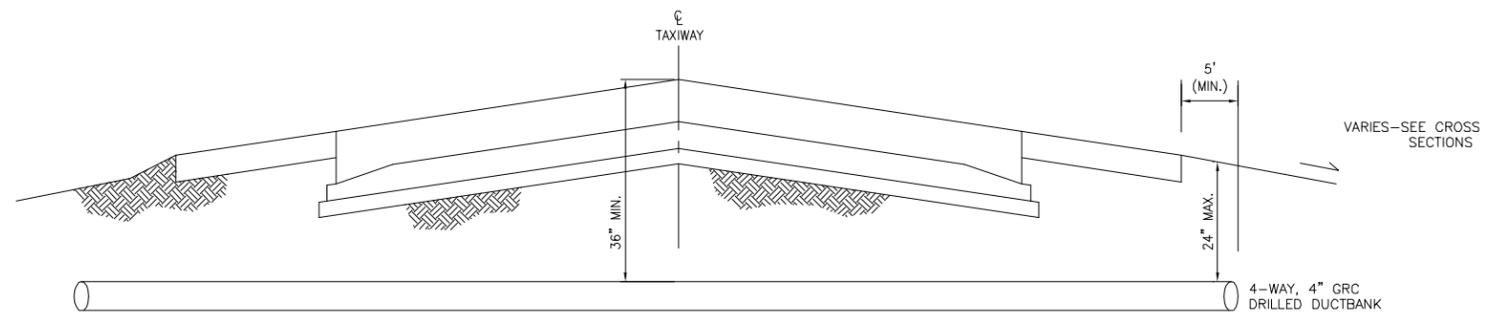
1. PLACE ONE 10' SPLIT-DUCT SECTION UNDER CABLE.
2. IN ORDER TO STAGGER JOINTS, SAW ANOTHER SECTION IN HALF (ABOUT 5' FEET LONG).
3. PLACE 5' SECTION OVER CABLE AND SNAP THE TWO SECTIONS TOGETHER.
4. PLACE STRAP ABOUT 1' FROM THE END AND STRAP ANOTHER ABOUT 1' FROM THE JOINT WHERE THE ENDS OF THE TOP SECTIONS WILL BUTT.
5. PLACE ANOTHER 10' SPLIT-DUCT SECTION OVER THE OPEN HALF OF THE BOTTOM SECTION, BUTT THE ENDS TIGHTLY TOGETHER AND SNAP THE SECTION TOGETHER.
6. PLACE A LENGTH OF DUCT TAPE AROUND BOTH SECTIONS OF THE SPLIT-DUCT TO COVER THE BUTTED JOINT AND THE LONGITUDINAL JOINTS.
7. PLACE A STRAP ABOUT 1' BEYOND THE TAPED JOINT.
8. LAY ANOTHER LENGTH OF SPLIT-DUCT UNDERNEATH THE CABLE, BUTT TOGETHER, TAPE THE BUTTED JOINT AND LONGITUDINAL JOINT STRAP ONE FOOT ON EACH SIDE OF THE JOINT.
9. REPEAT PROCEDURE AS REQUIRED.
10. USE APPROPRIATE FITTINGS, COUPLINGS ETC. WHEN JOINING SPLIT-DUCT TO EXISTING DUCTS ETC.



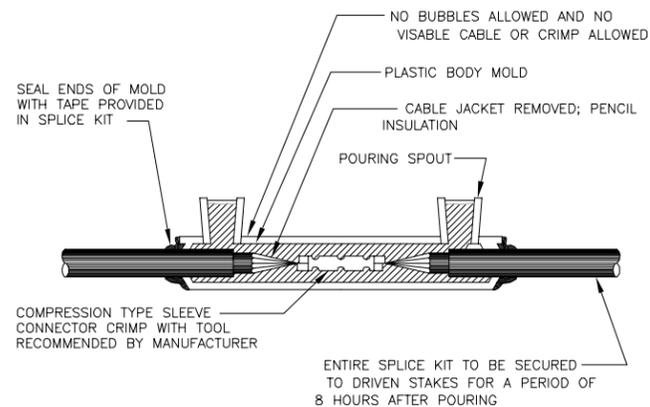
SPLIT DUCT INSTALLATION DETAIL
N.T.S.



**TYPICAL 1 WAY 4' SPLIT-DUCT
CONCRETE ENCASED**
N.T.S.



TYPICAL CONDUIT DRILLED UNDER TAXIWAY
SCALE: N.T.S.



FOR SPLICES IN HOMERUNS AND FOR EXTENSION TO EXISTING CABLES, ONLY USE WITH WRITTEN AUTHORIZATION BY ENGINEER. SHALL NOT BE USED IN DUCT OR DIRECT BURIAL.

TYPE "A"