

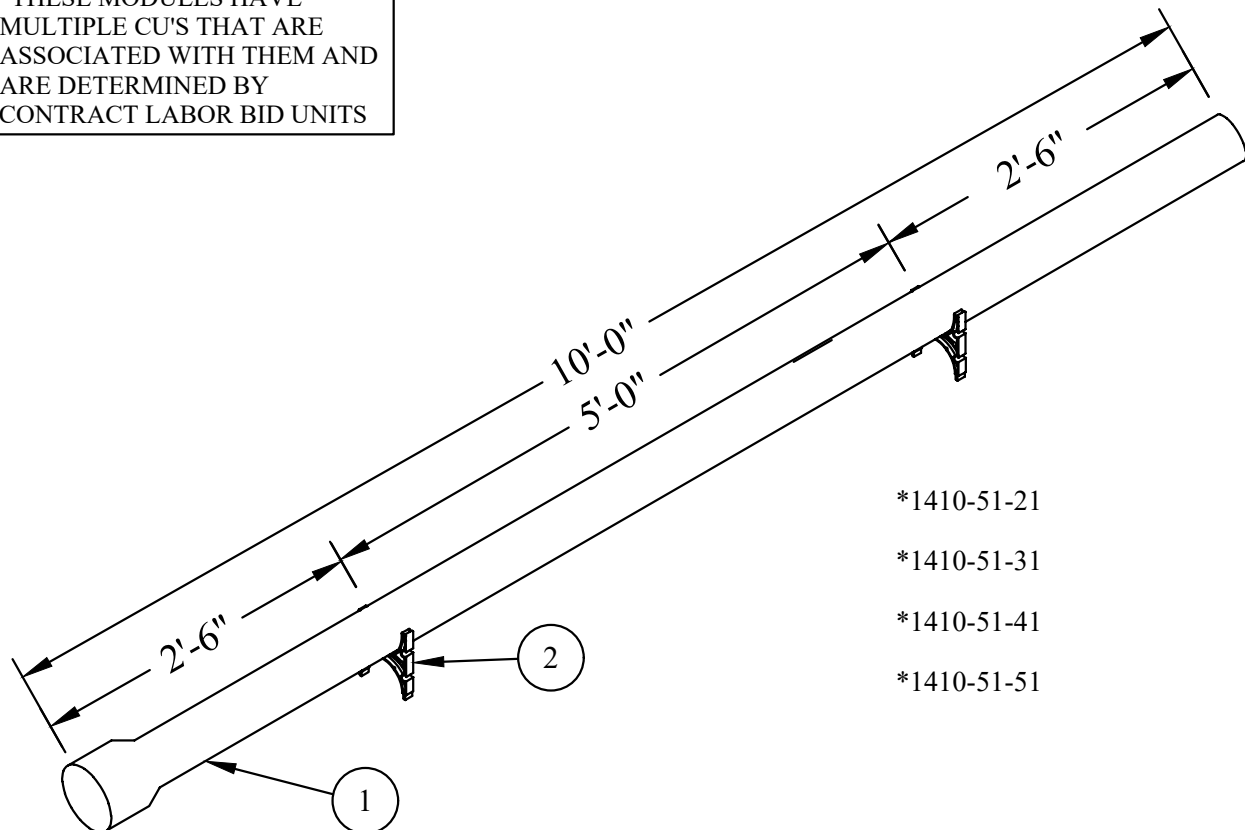
1410

DUCT BANKS

CONTAINS

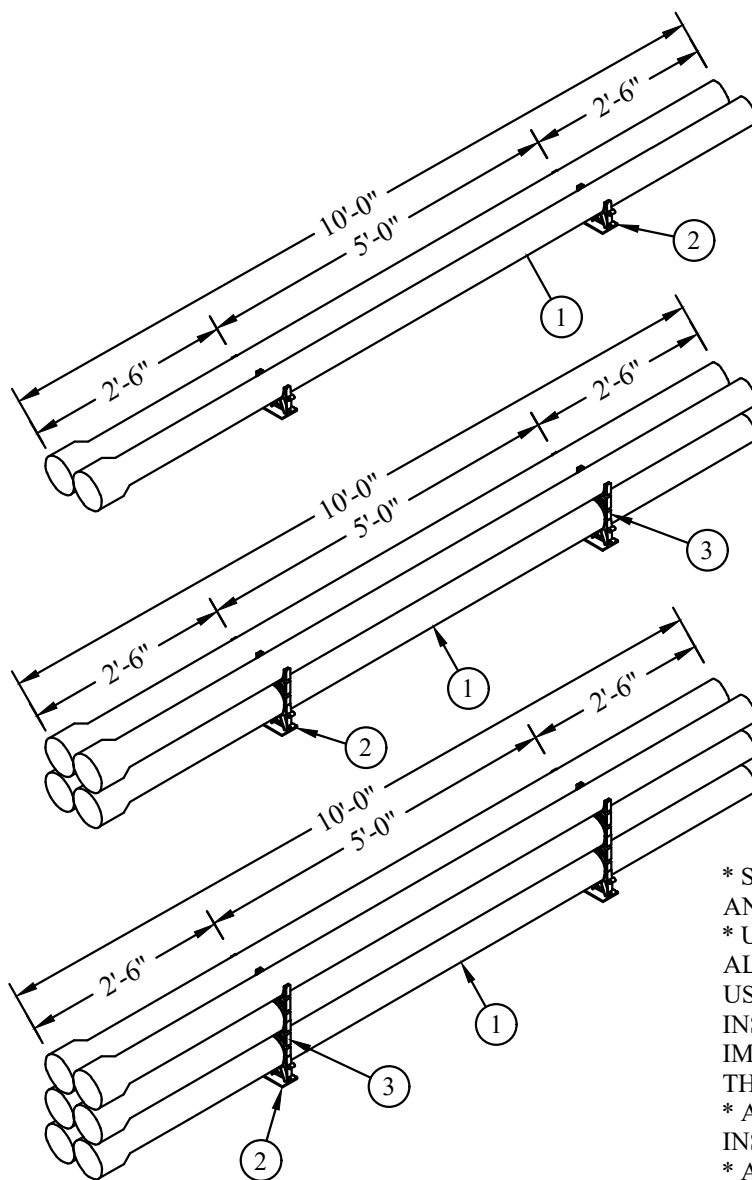
- 1410-51 DUCT BANKS SCHEDULE 40 (1 CONDUIT)
- 1410-53 DUCT BANKS SCHEDULE 40 (2, 4, OR 6 CONDUITS)
- 1410-55 DUCT BANKS SCHEDULE 40 (9 CONDUITS)
- 1410-56 DUCT BANKS PVC (12 CONDUITS)
- 1410-57 DUCT BANKS PVC (15 CONDUITS)
- 1410-58 DUCT BANKS PVC (19 CONDUITS)
- 1410-60 CONDUIT TERMINATIONS RISER
- 1410-63 CONDUIT TERMINATIONS - VARIOUS

*THESE MODULES HAVE MULTIPLE CU'S THAT ARE ASSOCIATED WITH THEM AND ARE DETERMINED BY CONTRACT LABOR BID UNITS



- SEE PAGES 1419-10 TO 1419-20 FOR BACKFILL AND ENCASEMENTS.
- ALWAYS USE SPACERS WHEN CONDUIT IS INSTALLED IN A STACKED CONFIGURATION.
- ALWAYS ENCASE 5-IN. AND 6-IN. CONDUITS.
- USE ENCASED-BURIED (EB) CONDUIT FOR ALL CONCRETE-ENCASED INSTALLATIONS. USE DIRECT-BURIED (DB) CONDUIT FOR INSTALLATIONS WHEN SAND OR IMPORTED/NATIVE MATERIAL SURROUNDS THE CONDUIT.
- USE INTERMEDIATE CONDUIT MODULES 1410-51 ALONG WITH CONFIGURATIONS SHOWN ON PAGES 1410-53 THROUGH 1410-55 TO MAKE UP THE DESIRED NUMBER OF CONDUITS IN A DUCT BANK. TO AVOID HAVING CABLES COMPLETELY SURROUNDED BY OTHER CABLES, TYPICALLY INSTALL DUCT BANKS NO MORE THAN THREE CONDUITS WIDE AND FOUR CONDUITS HIGH.
- ALWAYS USE TYPE PVC SCHEDULE 40 FOR ALL STREET CROSSING IN DB AND CONCRETE-CAPPED INSTALLATIONS.
- SURROUND DB CONDUIT WITH SAND OR BACKFILL MATERIAL CAPABLE OF PASSING THROUGH A 3/8-IN. SIEVE. GRAVEL CONTENT IN BACKFILL MIX SHALL NOT BE MORE THAN 50% IN VOLUME. TO AVOID DAMAGE TO DB ELECTRICAL CONDUIT, GRADE BOTTOM OF TRENCH SMOOTH. TOP DB CONDUIT WITH 6-IN. (AFTER COMPACTION) OF THE SAME BASE MATERIAL. ACCEPTABLE BASE MATERIAL FOR DB INSTALLATIONS IS SAND, SANDY LOAM, NATIVE MATERIAL, OR A COMBINATION THEREOF. THE BACKFILL MATERIAL ABOVE THE 4-IN. LAYER SPECIFIED ABOVE SHALL BE FREE OF ROCKS LARGER THAN 6-IN. IN ANY DIMENSION.
- IF CROSSING MAJOR UTILITIES OR UNDER TRAIN TRACKS, STEEL RIGID MAY BE REQUIRED.

CU-REF	CU-ID	CU-DESCRIPTION
14105121A	DB2INSH401X1PEA	DUCT BANK 2IN SH40 1X1 PRI EAST ARTERIAL
14105121B	DB2INSH401X1PWA	DUCT BANK 2IN SH40 1X1 PRI WEST ARTERIAL
14105121C	DB2INSH401X1PEL	DUCT BANK 2IN SH40 1X1 PRI EAST LOCAL
14105121D	DB2INSH401X1PWL	DUCT BANK 2IN SH40 1X1 PRI WEST LOCAL
14105121E	DB2INSH401X1PN	DUCT BANK 2IN SH40 1X1 PRI NETWORK
14105121F	DB2INSH401X1SEA	DUCT BANK 2IN SH40 1X1 SEC EAST ARTERIAL
14105121G	DB2INSH401X1SWA	DUCT BANK 2IN SH40 1X1 SEC WEST ARTERIAL
14105121H	DB2INSH401X1SEL	DUCT BANK 2IN SH40 1X1 SEC EAST LOCAL
14105121I	DB2INSH401X1SWL	DUCT BANK 2IN SH40 1X1 SEC WEST LOCAL
14105121J	DB2INSH401X1SN	DUCT BANK 2IN SH40 1X1 SEC NETWORK
14105131A	DB3INSH401X1PEA	DUCT BANK 3IN SH40 1X1 PRI EAST ARTERIAL
14105131B	DB3INSH401X1PWA	DUCT BANK 3IN SH40 1X1 PRI WEST ARTERIAL
14105131C	DB3INSH401X1PEL	DUCT BANK 3IN SH40 1X1 PRI EAST LOCAL
14105131D	DB3INSH401X1PWL	DUCT BANK 3IN SH40 1X1 PRI WEST LOCAL
14105131E	DB3INSH401X1PN	DUCT BANK 3IN SH40 1X1 PRI NETWORK
14105131F	DB3INSH401X1SEA	DUCT BANK 3IN SH40 1X1 SEC EAST ARTERIAL
14105131G	DB3INSH401X1SWA	DUCT BANK 3IN SH40 1X1 SEC WEST ARTERIAL
14105131H	DB3INSH401X1SEL	DUCT BANK 3IN SH40 1X1 SEC EAST LOCAL
14105131I	DB3INSH401X1SWL	DUCT BANK 3IN SH40 1X1 SEC WEST LOCAL
14105131J	DB3INSH401X1SN	DUCT BANK 3IN SH40 1X1 SEC NETWORK
14105141A	DB4INSH401X1PEA	DUCT BANK 4IN SH40 1X1 PRI EAST ARTERIAL
14105141B	DB4INSH401X1PWA	DUCT BANK 4IN SH40 1X1 PRI WEST ARTERIAL
14105141C	DB4INSH401X1PEL	DUCT BANK 4IN SH40 1X1 PRI EAST LOCAL
14105141D	DB4INSH401X1PWL	DUCT BANK 4IN SH40 1X1 PRI WEST LOCAL
14105141E	DB4INSH401X1PN	DUCT BANK 4IN SH40 1X1 PRI NETWORK
14105141F	DB4INSH401X1SEA	DUCT BANK 4IN SH40 1X1 SEC EAST ARTERIAL
14105141G	DB4INSH401X1SWA	DUCT BANK 4IN SH40 1X1 SEC WEST ARTERIAL
14105141H	DB4INSH401X1SEL	DUCT BANK 4IN SH40 1X1 SEC EAST LOCAL
14105141I	DB4INSH401X1SWL	DUCT BANK 4IN SH40 1X1 SEC WEST LOCAL
14105141J	DB4INSH401X1SN	DUCT BANK 4IN SH40 1X1 SEC NETWORK
14105151A	DB5INSH401X1PEA	DUCT BANK 5IN SH40 1X1 PRI EAST ARTERIAL
14105151B	DB5INSH401X1PWA	DUCT BANK 5IN SH40 1X1 PRI WEST ARTERIAL
14105151C	DB5INSH401X1PEL	DUCT BANK 5IN SH40 1X1 PRI EAST LOCAL
14105151D	DB5INSH401X1PWL	DUCT BANK 5IN SH40 1X1 PRI WEST LOCAL
14105151E	DB5INSH401X1PN	DUCT BANK 5IN SH40 1X1 PRI NETWORK
14105151F	DB5INSH401X1SEA	DUCT BANK 5IN SH40 1X1 SEC EAST ARTERIAL
14105151G	DB5INSH401X1SWA	DUCT BANK 5IN SH40 1X1 SEC WEST ARTERIAL
14105151H	DB5INSH401X1SEL	DUCT BANK 5IN SH40 1X1 SEC EAST LOCAL
14105151I	DB5INSH401X1SWL	DUCT BANK 5IN SH40 1X1 SEC WEST LOCAL
14105151J	DB5INSH401X1SN	DUCT BANK 5IN SH40 1X1 SEC NETWORK



*1410-53-22
*1410-53-32
*1410-53-42
*1410-53-52

*THESE MODULES HAVE
MULTIPLE CU'S THAT ARE
ASSOCIATED WITH THEM AND
ARE DETERMINED BY
CONTRACT LABOR BID UNITS

*1410-53-24
*1410-53-34
*1410-53-44
*1410-53-54

*1410-53-26
*1410-53-36
*1410-53-46
*1410-53-56

- * SEE PAGES 1419-10 TO 1419-20 FOR BACKFILL AND ENCASEMENTS.
- * USE ENCASED-BURIED (EB) CONDUIT FOR ALL CONCRETE-ENCASED INSTALLATIONS. USE DIRECT-BURIED (DB) CONDUIT FOR INSTALLATIONS WHEN SAND OR IMPORTED/NATIVE MATERIAL SURROUNDS THE CONDUIT.
- * ALWAYS USE SPACERS WHEN CONDUIT IS INSTALLED IN A STACKED CONFIGURATION.
- * ALWAYS ENCASE 5-IN. AND 6-IN. CONDUITS.

USE INTERMEDIATE CONDUIT MODULES 1410-51 ALONG WITH CONFIGURATIONS SHOWN ON PAGES 1410-53 THROUGH 1410-55 TO MAKE UP THE DESIRED NUMBER OF CONDUITS IN A DUCT BANK. TO AVOID HAVING CABLES COMPLETELY SURROUNDED BY OTHER CABLES, TYPICALLY INSTALL DUCT BANKS NO MORE THAN THREE CONDUITS WIDE AND FOUR CONDUITS HIGH.

ALWAYS USE TYPE PVC SCHEDULE 40 FOR ALL STREET CROSSING IN DB AND CONCRETE-CAPPED INSTALLATIONS.

SURROUND DB CONDUIT WITH SAND OR BACKFILL MATERIAL CAPABLE OF PASSING THROUGH A 3/8-IN. SIEVE. GRAVEL CONTENT IN BACKFILL MIX SHALL NOT BE MORE THAN 50% IN VOLUME. TO AVOID DAMAGE TO DB ELECTRICAL CONDUIT, GRADE BOTTOM OF TRENCH SMOOTH. TOP DB CONDUIT WITH 6-IN. (AFTER COMPACTION) OF THE SAME BASE MATERIAL. ACCEPTABLE BASE MATERIAL FOR DB INSTALLATIONS IS SAND, SANDY LOAM, NATIVE MATERIAL, OR A COMBINATION THEREOF. THE BACKFILL MATERIAL ABOVE THE 6-IN. LAYER SPECIFIED ABOVE SHALL BE FREE OF ROCKS LARGER THAN 4-IN. IN ANY DIMENSION.

IF CROSSING MAJOR UTILITIES OR UNDER TRAIN TRACKS, STEEL RIGID MAY BE REQUIRED.

CIVIL

DUCT BANKS

DUCT BANKS SCHEDULE 40 (2, 4, OR 6 CONDUITS)

CU-REF	CU-ID	CU-DESCRIPTION
14105322A	DB2INSH401X2PEA	DUCT BANK 2IN SH40 1X2 PRI EAST ARTERIAL
14105322B	DB2INSH401X2PWA	DUCT BANK 2IN SH40 1X2 PRI WEST ARTERIAL
14105322C	DB2INSH401X2PEL	DUCT BANK 2IN SH40 1X2 PRI EAST LOCAL
14105322D	DB2INSH401X2PWL	DUCT BANK 2IN SH40 1X2 PRI WEST LOCAL
14105322E	DB2INSH401X2PN	DUCT BANK 2IN SH40 1X2 PRI NETWORK
14105322F	DB2INSH401X2SEA	DUCT BANK 2IN SH40 1X2 SEC EAST ARTERIAL
14105322G	DB2INSH401X2SWA	DUCT BANK 2IN SH40 1X2 SEC WEST ARTERIAL
14105322H	DB2INSH401X2SEL	DUCT BANK 2IN SH40 1X2 SEC EAST LOCAL
14105322I	DB2INSH401X2SWL	DUCT BANK 2IN SH40 1X2 SEC WEST LOCAL
14105322J	DB2INSH401X2SN	DUCT BANK 2IN SH40 1X2 SEC NETWORK
14105324A	DB2INSH402X2PEA	DUCT BANK 2IN SH40 2X2 PRI EAST ARTERIAL
14105324B	DB2INSH402X2PWA	DUCT BANK 2IN SH40 2X2 PRI WEST ARTERIAL
14105324C	DB2INSH402X2PEL	DUCT BANK 2IN SH40 2X2 PRI EAST LOCAL
14105324D	DB2INSH402X2PWL	DUCT BANK 2IN SH40 2X2 PRI WEST LOCAL
14105324E	DB2INSH402X2PN	DUCT BANK 2IN SH40 2X2 PRI NETWORK
14105324F	DB2INSH402X2SEA	DUCT BANK 2IN SH40 2X2 SEC EAST ARTERIAL
14105324G	DB2INSH402X2SWA	DUCT BANK 2IN SH40 2X2 SEC WEST ARTERIAL
14105324H	DB2INSH402X2SEL	DUCT BANK 2IN SH40 2X2 SEC EAST LOCAL
14105324I	DB2INSH402X2SWL	DUCT BANK 2IN SH40 2X2 SEC WEST LOCAL
14105324J	DB2INSH402X2SN	DUCT BANK 2IN SH40 2X2 SEC NETWORK
14105326A	DB2INSH403X2PEA	DUCT BANK 2IN SH40 3X2 PRI EAST ARTERIAL
14105326B	DB2INSH403X2PWA	DUCT BANK 2IN SH40 3X2 PRI WEST ARTERIAL
14105326C	DB2INSH403X2PEL	DUCT BANK 2IN SH40 3X2 PRI EAST LOCAL
14105326D	DB2INSH403X2PWL	DUCT BANK 2IN SH40 3X2 PRI WEST LOCAL
14105326E	DB2INSH403X2PN	DUCT BANK 2IN SH40 3X2 PRI NETWORK
14105326F	DB2INSH403X2SEA	DUCT BANK 2IN SH40 3X2 SEC EAST ARTERIAL
14105326G	DB2INSH403X2SWA	DUCT BANK 2IN SH40 3X2 SEC WEST ARTERIAL
14105326H	DB2INSH403X2SEL	DUCT BANK 2IN SH40 3X2 SEC EAST LOCAL
14105326I	DB2INSH403X2SWL	DUCT BANK 2IN SH40 3X2 SEC WEST LOCAL
14105326J	DB2INSH403X2SN	DUCT BANK 2IN SH40 3X2 SEC NETWORK
14105332A	DB3INSH401X2PEA	DUCT BANK 3IN SH40 1X2 PRI EAST ARTERIAL
14105332B	DB3INSH401X2PWA	DUCT BANK 3IN SH40 1X2 PRI WEST ARTERIAL
14105332C	DB3INSH401X2PEL	DUCT BANK 3IN SH40 1X2 PRI EAST LOCAL
14105332D	DB3INSH401X2PWL	DUCT BANK 3IN SH40 1X2 PRI WEST LOCAL
14105332E	DB3INSH401X2PN	DUCT BANK 3IN SH40 1X2 PRI NETWORK
14105332F	DB3INSH401X2SEA	DUCT BANK 3IN SH40 1X2 SEC EAST ARTERIAL
14105332G	DB3INSH401X2SWA	DUCT BANK 3IN SH40 1X2 SEC WEST ARTERIAL
14105332H	DB3INSH401X2SEL	DUCT BANK 3IN SH40 1X2 SEC EAST LOCAL
14105332I	DB3INSH401X2SWL	DUCT BANK 3IN SH40 1X2 SEC WEST LOCAL
14105332J	DB3INSH401X2SN	DUCT BANK 3IN SH40 1X2 SEC NETWORK
14105334A	DB3INSH402X2PEA	DUCT BANK 3IN SH40 2X2 PRI EAST ARTERIAL
14105334B	DB3INSH402X2PWA	DUCT BANK 3IN SH40 2X2 PRI WEST ARTERIAL
14105334C	DB3INSH402X2PEL	DUCT BANK 3IN SH40 2X2 PRI EAST LOCAL
14105334D	DB3INSH402X2PWL	DUCT BANK 3IN SH40 2X2 PRI WEST LOCAL
14105334E	DB3INSH402X2PN	DUCT BANK 3IN SH40 2X2 PRI NETWORK
14105334F	DB3INSH402X2SEA	DUCT BANK 3IN SH40 2X2 SEC EAST ARTERIAL
14105334G	DB3INSH402X2SWA	DUCT BANK 3IN SH40 2X2 SEC WEST ARTERIAL
14105334H	DB3INSH402X2SEL	DUCT BANK 3IN SH40 2X2 SEC EAST LOCAL
14105334I	DB3INSH402X2SWL	DUCT BANK 3IN SH40 2X2 SEC WEST LOCAL
14105334J	DB3INSH402X2SN	DUCT BANK 3IN SH40 2X2 SEC NETWORK
14105336A	DB3INSH403X2PEA	DUCT BANK 2IN SH40 1X2 SEC EAST ARTERIAL
14105336B	DB3INSH403X2PWA	DUCT BANK 2IN SH40 1X2 SEC WEST ARTERIAL
14105336C	DB3INSH403X2PEL	DUCT BANK 2IN SH40 1X2 SEC EAST LOCAL
14105336D	DB3INSH403X2PWL	DUCT BANK 2IN SH40 1X2 SEC WEST LOCAL
14105336E	DB3INSH403X2PN	DUCT BANK 2IN SH40 1X2 SEC NETWORK
14105336F	DB3INSH403X2SEA	DUCT BANK 3IN SH40 3X2 SEC EAST ARTERIAL
14105336G	DB3INSH403X2SWA	DUCT BANK 3IN SH40 3X2 SEC WEST ARTERIAL
14105336H	DB3INSH403X2SEL	DUCT BANK 3IN SH40 3X2 SEC EAST LOCAL
14105336I	DB3INSH403X2SWL	DUCT BANK 3IN SH40 3X2 SEC WEST LOCAL
14105336J	DB3INSH403X2SN	DUCT BANK 3IN SH40 3X2 SEC NETWORK

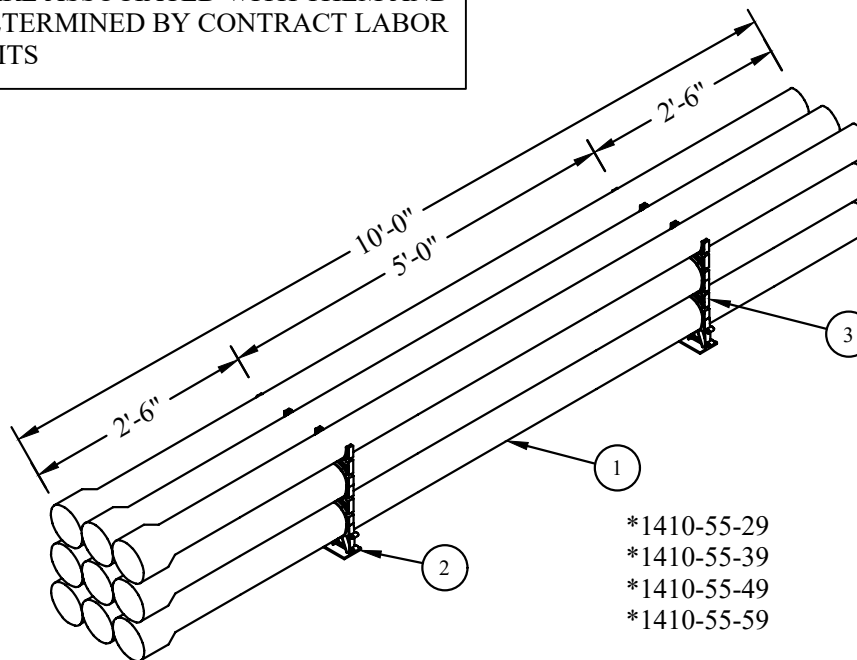
CIVIL

DUCT BANKS

DUCT BANKS SCHEDULE 40 CONDUIT (2, 4, OR 6 CONDUITS)

CU-REF	CU-ID	CU-DESCRIPTION
14105342A	DB4INSH401X2PEA	DUCT BANK 4IN SH40 1X2 PRI EAST ARTERIAL
14105342B	DB4INSH401X2PWA	DUCT BANK 4IN SH40 1X2 PRI WEST ARTERIAL
14105342C	DB4INSH401X2PEL	DUCT BANK 4IN SH40 1X2 PRI EAST LOCAL
14105342D	DB4INSH401X2PWL	DUCT BANK 4IN SH40 1X2 PRI WEST LOCAL
14105342E	DB4INSH401X2PN	DUCT BANK 4IN SH40 1X2 PRI NETWORK
14105342F	DB4INSH401X2SEA	DUCT BANK 4IN SH40 1X2 SEC EAST ARTERIAL
14105342G	DB4INSH401X2SWA	DUCT BANK 4IN SH40 1X2 SEC WEST ARTERIAL
14105342H	DB4INSH401X2SEL	DUCT BANK 4IN SH40 1X2 SEC EAST LOCAL
14105342I	DB4INSH401X2SWL	DUCT BANK 4IN SH40 1X2 SEC WEST LOCAL
14105342J	DB4INSH401X2SN	DUCT BANK 4IN SH40 1X2 SEC NETWORK
14105344A	DB4INSH402X2PEA	DUCT BANK 4IN SH40 2X2 PRI EAST ARTERIAL
14105344B	DB4INSH402X2PWA	DUCT BANK 4IN SH40 2X2 PRI WEST ARTERIAL
14105344C	DB4INSH402X2PEL	DUCT BANK 4IN SH40 2X2 PRI EAST LOCAL
14105344D	DB4INSH402X2PWL	DUCT BANK 4IN SH40 2X2 PRI WEST LOCAL
14105344E	DB4INSH402X2PN	DUCT BANK 4IN SH40 2X2 PRI NETWORK
14105344F	DB4INSH402X2SEA	DUCT BANK 4IN SH40 2X2 SEC EAST ARTERIAL
14105344G	DB4INSH402X2SWA	DUCT BANK 4IN SH40 2X2 SEC WEST ARTERIAL
14105344H	DB4INSH402X2SEL	DUCT BANK 4IN SH40 2X2 SEC EAST LOCAL
14105344I	DB4INSH402X2SWL	DUCT BANK 4IN SH40 2X2 SEC WEST LOCAL
14105344J	DB4INSH402X2SN	DUCT BANK 4IN SH40 2X2 SEC NETWORK
14105346A	DB4INSH403X2PEA	DUCT BANK 4IN SH40 3X2 PRI EAST ARTERIAL
14105346B	DB4INSH403X2PWA	DUCT BANK 4IN SH40 3X2 PRI WEST ARTERIAL
14105346C	DB4INSH403X2PEL	DUCT BANK 4IN SH40 3X2 PRI EAST LOCAL
14105346D	DB4INSH403X2PWL	DUCT BANK 4IN SH40 3X2 PRI WEST LOCAL
14105346E	DB4INSH403X2PN	DUCT BANK 4IN SH40 3X2 PRI NETWORK
14105346F	DB4INSH403X2SEA	DUCT BANK 4IN SH40 3X2 SEC EAST ARTERIAL
14105346G	DB4INSH403X2SWA	DUCT BANK 4IN SH40 3X2 SEC WEST ARTERIAL
14105346H	DB4INSH403X2SEL	DUCT BANK 4IN SH40 3X2 SEC EAST LOCAL
14105346I	DB4INSH403X2SWL	DUCT BANK 4IN SH40 3X2 SEC WEST LOCAL
14105346J	DB4INSH403X2SN	DUCT BANK 4IN SH40 3X2 SEC NETWORK
14105352A	DB2INSH401X2PEA	DUCT BANK 2IN SH40 1X2 PRI EAST ARTERIAL
14105352B	DB2INSH401X2PWA	DUCT BANK 2IN SH40 1X2 PRI WEST ARTERIAL
14105352C	DB2INSH401X2PEL	DUCT BANK 2IN SH40 1X2 PRI EAST LOCAL
14105352D	DB2INSH401X2PWL	DUCT BANK 2IN SH40 1X2 PRI WEST LOCAL
14105352E	DB2INSH401X2PN	DUCT BANK 2IN SH40 1X2 PRI NETWORK
14105352F	DB2INSH401X2SEA	DUCT BANK 2IN SH40 1X2 SEC EAST ARTERIAL
14105352G	DB2INSH401X2SWA	DUCT BANK 2IN SH40 1X2 SEC WEST ARTERIAL
14105352H	DB2INSH401X2SEL	DUCT BANK 2IN SH40 1X2 SEC EAST LOCAL
14105352I	DB2INSH401X2SWL	DUCT BANK 2IN SH40 1X2 SEC WEST LOCAL
14105352J	DB2INSH401X2SN	DUCT BANK 2IN SH40 1X2 SEC NETWORK
14105354A	DB2INSH402X2PEA	DUCT BANK 2IN SH40 2X2 PRI EAST ARTERIAL
14105354B	DB2INSH402X2PWA	DUCT BANK 2IN SH40 2X2 PRI WEST ARTERIAL
14105354C	DB2INSH402X2PEL	DUCT BANK 2IN SH40 2X2 PRI EAST LOCAL
14105354D	DB2INSH402X2PWL	DUCT BANK 2IN SH40 2X2 PRI WEST LOCAL
14105354E	DB2INSH402X2PN	DUCT BANK 2IN SH40 2X2 PRI NETWORK
14105354F	DB2INSH402X2SEA	DUCT BANK 2IN SH40 2X2 SEC EAST ARTERIAL
14105354G	DB2INSH402X2SWA	DUCT BANK 2IN SH40 2X2 SEC WEST ARTERIAL
14105354H	DB2INSH402X2SEL	DUCT BANK 2IN SH40 2X2 SEC EAST LOCAL
14105354I	DB2INSH402X2SWL	DUCT BANK 2IN SH40 2X2 SEC WEST LOCAL
14105354J	DB2INSH402X2SN	DUCT BANK 2IN SH40 2X2 SEC NETWORK
14105356A	DB2INSH403X2PEA	DUCT BANK 2IN SH40 3X2 PRI EAST ARTERIAL
14105356B	DB2INSH403X2PWA	DUCT BANK 2IN SH40 3X2 PRI WEST ARTERIAL
14105356C	DB2INSH403X2PEL	DUCT BANK 2IN SH40 3X2 PRI EAST LOCAL
14105356D	DB2INSH403X2PWL	DUCT BANK 2IN SH40 3X2 PRI WEST LOCAL
14105356E	DB2INSH403X2PN	DUCT BANK 2IN SH40 3X2 PRI NETWORK
14105356F	DB2INSH403X2SEA	DUCT BANK 2IN SH40 3X2 SEC EAST ARTERIAL
14105356G	DB2INSH403X2SWA	DUCT BANK 2IN SH40 3X2 SEC WEST ARTERIAL
14105356H	DB2INSH403X2SEL	DUCT BANK 2IN SH40 3X2 SEC EAST LOCAL
14105356I	DB2INSH403X2SWL	DUCT BANK 2IN SH40 3X2 SEC WEST LOCAL
14105356J	DB2INSH403X2SN	DUCT BANK 2IN SH40 3X2 SEC NETWORK

*THESE MODULES HAVE MULTIPLE CU'S THAT ARE ASSOCIATED WITH THEM AND ARE DETERMINED BY CONTRACT LABOR BID UNITS



SEE PAGES 1419-10 TO 1419-20 FOR BACKFILL AND ENCASEMENTS.

USE ENCASED-BURIED (EB) CONDUIT FOR ALL CONCRETE-ENCASED INSTALLATIONS. USE DIRECT-BURIED (DB) CONDUIT FOR INSTALLATIONS WHEN SAND OR IMPORTED/NATIVE MATERIAL SURROUNDS THE CONDUIT.

ALWAYS USE SPACERS WHEN CONDUIT IS INSTALLED IN A STACKED CONFIGURATION.

ALWAYS ENCASE 5-IN. AND 6-IN. CONDUITS.

USE INTERMEDIATE CONDUIT MODULES 1410-51 ALONG WITH CONFIGURATIONS SHOWN ON PAGES 1410-53 THROUGH 1410-55 TO MAKE UP THE DESIRED NUMBER OF CONDUITS IN A DUCT BANK. TO AVOID HAVING CABLES COMPLETELY SURROUNDED BY OTHER CABLES, TYPICALLY INSTALL DUCT BANKS NO MORE THAN THREE CONDUITS WIDE AND FOUR CONDUITS HIGH.

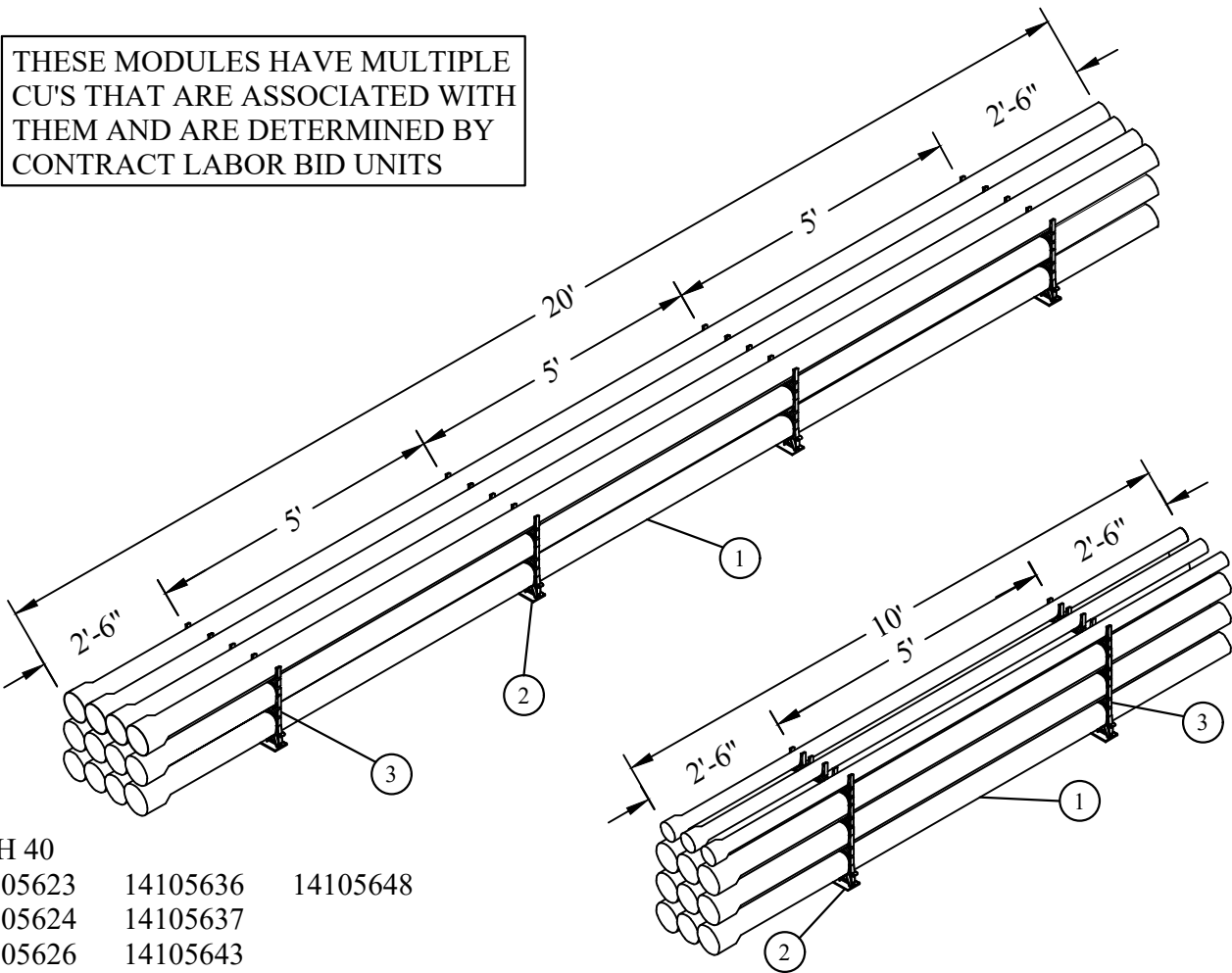
ALWAYS USE TYPE PVC SCHEDULE 40 FOR ALL STREET CROSSING IN DB AND CONCRETE-CAPPED INSTALLATIONS.

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IF CROSSING MAJOR UTILITIES OR UNDER TRAIN TRACKS, STEEL RIGID MAY BE REQUIRED.

CU-REF	CU-ID	CU-DESCRIPTION
14105529A	DB2INSH403X3PEA	DUCT BANK 2IN SH40 3X3 PRI EAST ARTERIAL
14105529B	DB2INSH403X3PWA	DUCT BANK 2IN SH40 3X3 PRI WEST ARTERIAL
14105529C	DB2INSH403X3PEL	DUCT BANK 2IN SH40 3X3 PRI EAST LOCAL
14105529D	DB2INSH403X3PWL	DUCT BANK 2IN SH40 3X3 PRI WEST LOCAL
14105529E	DB2INSH403X3PN	DUCT BANK 2IN SH40 3X3 PRI NETWORK
14105529F	DB2INSH403X3SEA	DUCT BANK 2IN SH40 3X3 SEC EAST ARTERIAL
14105529G	DB2INSH403X3SWA	DUCT BANK 2IN SH40 3X3 SEC WEST ARTERIAL
14105529H	DB2INSH403X3SEL	DUCT BANK 2IN SH40 3X3 SEC EAST LOCAL
14105529I	DB2INSH403X3SWL	DUCT BANK 2IN SH40 3X3 SEC WEST LOCAL
14105529J	DB2INSH403X3SN	DUCT BANK 2IN SH40 3X3 SEC NETWORK
14105539A	DB3INSH403X3PEA	DUCT BANK 3IN SH40 3X3 PRI EAST ARTERIAL
14105539B	DB3INSH403X3PWA	DUCT BANK 3IN SH40 3X3 PRI WEST ARTERIAL
14105539C	DB3INSH403X3PEL	DUCT BANK 3IN SH40 3X3 PRI EAST LOCAL
14105539D	DB3INSH403X3PWL	DUCT BANK 3IN SH40 3X3 PRI WEST LOCAL
14105539E	DB3INSH403X3PN	DUCT BANK 3IN SH40 3X3 PRI NETWORK
14105539F	DB3INSH403X3SEA	DUCT BANK 3IN SH40 3X3 SEC EAST ARTERIAL
14105539G	DB3INSH403X3SWA	DUCT BANK 3IN SH40 3X3 SEC WEST ARTERIAL
14105539H	DB3INSH403X3SEL	DUCT BANK 3IN SH40 3X3 SEC EAST LOCAL
14105539I	DB3INSH403X3SWL	DUCT BANK 3IN SH40 3X3 SEC WEST LOCAL
14105539J	DB3INSH403X3SN	DUCT BANK 3IN SH40 3X3 SEC NETWORK
14105549A	DB4INSH403X3PEA	DUCT BANK 4IN SH40 3X3 PRI EAST ARTERIAL
14105549B	DB4INSH403X3PWA	DUCT BANK 4IN SH40 3X3 PRI WEST ARTERIAL
14105549C	DB4INSH403X3PEL	DUCT BANK 4IN SH40 3X3 PRI EAST LOCAL
14105549D	DB4INSH403X3PWL	DUCT BANK 4IN SH40 3X3 PRI WEST LOCAL
14105549E	DB4INSH403X3PN	DUCT BANK 4IN SH40 3X3 PRI NETWORK
14105549F	DB4INSH403X3SEA	DUCT BANK 4IN SH40 3X3 SEC EAST ARTERIAL
14105549G	DB4INSH403X3SWA	DUCT BANK 4IN SH40 3X3 SEC WEST ARTERIAL
14105549H	DB4INSH403X3SEL	DUCT BANK 4IN SH40 3X3 SEC EAST LOCAL
14105549I	DB4INSH403X3SWL	DUCT BANK 4IN SH40 3X3 SEC WEST LOCAL
14105549J	DB4INSH403X3SN	DUCT BANK 4IN SH40 3X3 SEC NETWORK
14105559A	DB5INSH403X3PEA	DUCT BANK 5IN SH40 3X3 PRI EAST ARTERIAL
14105559B	DB5INSH403X3PWA	DUCT BANK 5IN SH40 3X3 PRI WEST ARTERIAL
14105559C	DB5INSH403X3PEL	DUCT BANK 5IN SH40 3X3 PRI EAST LOCAL
14105559D	DB5INSH403X3PWL	DUCT BANK 5IN SH40 3X3 PRI WEST LOCAL
14105559E	DB5INSH403X3PN	DUCT BANK 5IN SH40 3X3 PRI NETWORK
14105559F	DB5INSH403X3SEA	DUCT BANK 5IN SH40 3X3 SEC EAST ARTERIAL
14105559G	DB5INSH403X3SWA	DUCT BANK 5IN SH40 3X3 SEC WEST ARTERIAL
14105559H	DB5INSH403X3SEL	DUCT BANK 5IN SH40 3X3 SEC EAST LOCAL
14105559I	DB5INSH403X3SWL	DUCT BANK 5IN SH40 3X3 SEC WEST LOCAL
14105559J	DB5INSH403X3SN	DUCT BANK 5IN SH40 3X3 SEC NETWORK

THESE MODULES HAVE MULTIPLE CU'S THAT ARE ASSOCIATED WITH THEM AND ARE DETERMINED BY CONTRACT LABOR BID UNITS



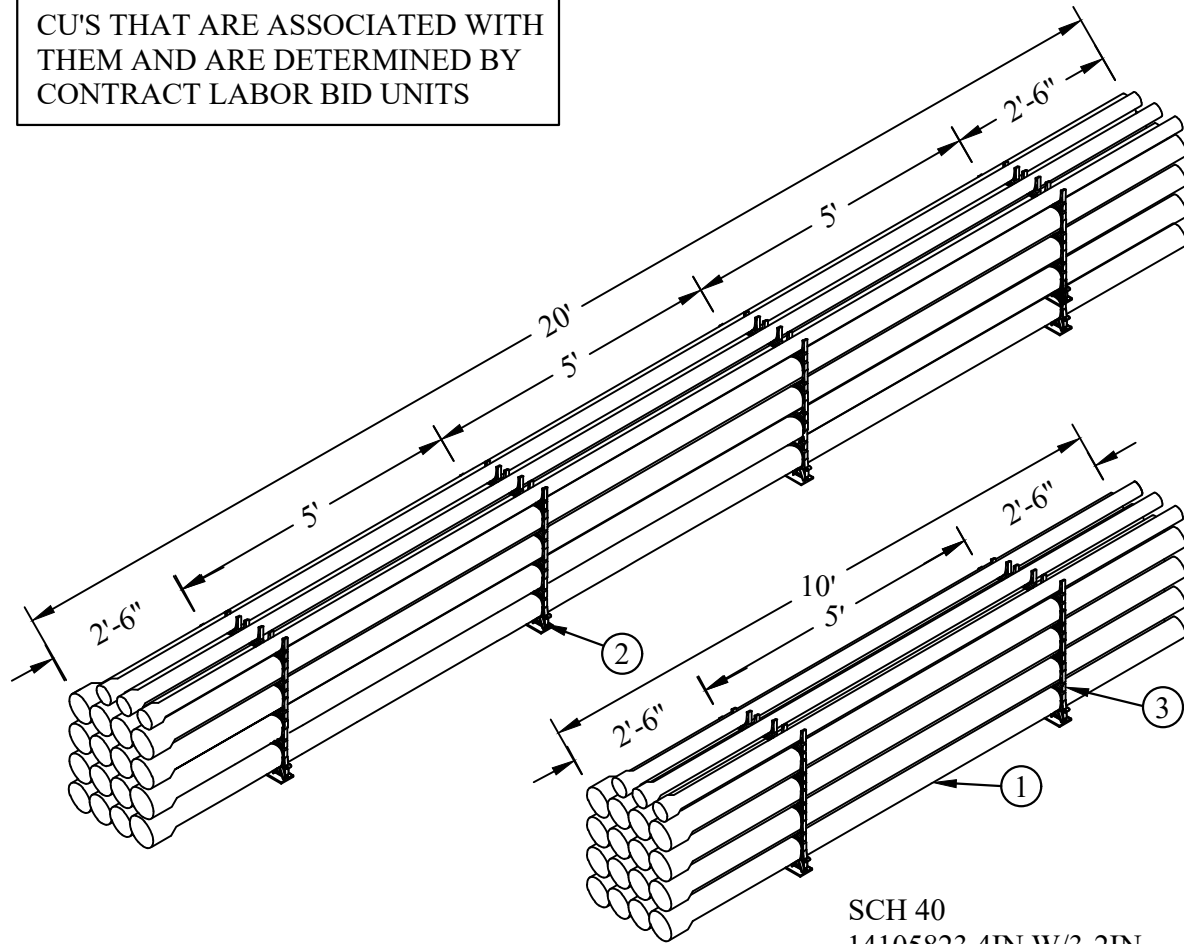
SCH 40		
14105623	14105636	14105648
14105624	14105637	
14105626	14105643	
14105627	14105644	
14105633	14105646	
14105634	14105647	

- NOTES:
- SEE PAGE 1419-20 FOR NETWORK TRENCH DETAILS.
 - ALWAYS USE SPACERS WHEN CONDUIT IS INSTALLED IN A STACKED CONFIGURATION.
 - ALWAYS ENCASE ALL CONDUITS WITH 2000 PSI CONCRETE.
 - ALWAYS USE TYPE PVC SCHEDULE 40 FOR ALL STREET CROSSINGS.

14105623	DB4INSH403X3W3-2IN12	DUCTBNK 4IN SH40 3X3 W/3-2IN 12 PRI NET
14105624	DB5INSH403X3W3-2IN12	DUCTBNK 5IN SH40 3X3 W/3-2IN 12 PRI NET
14105626	DB4INSH403X3W3-3IN12	DUCTBNK 4IN SH40 3X3 W/3-3IN 12 PRI NET
14105627	DB5INSH403X3W3-3IN12	DUCTBNK 5IN SH40 3X3 W/3-3IN 12 PRI NET
14105633	DB4INEB353X3W3-2IN12	DUCTBNK 4IN EB35 3X3 W/3-2IN 12 PRI NET
14105634	DB5INEB353X3W3-2IN12	DUCTBNK 5IN EB35 3X3 W/3-2IN 12 PRI NET
14105636	DB4INEB353X3W3-3IN12	DUCTBNK 4IN EB35 3X3 W/3-3IN 12 PRI NET
14105637	DB5INEB353X3W3-3IN12	DUCTBNK 5IN EB35 3X3 W/3-3IN 12 PRI NET
14105643	DB4INDB603X3W3-2IN12	DUCTBNK 4IN DB60 3X3 W/3-2IN 12 PRI NET
14105644	DB5INDB603X3W3-2IN12	DUCTBNK 5IN DB60 3X3 W/3-2IN 12 PRI NET
14105646	DB4INDB603X3W3-3IN12	DUCTBNK 4IN DB60 3X3 W/3-3IN 12 PRI NET
14105647	DB5INDB603X3W3-3IN12	DUCTBNK 5IN DB60 3X3 W/3-3IN 12 PRI NET
14105648	DB5INSH404X312	DUCTBNK 5IN SH40 3X4 12 PRI NET

CU-REF	CU-ID	CU-DESCRIPTION
14105723	DB4INSH403X4W3-2IN15	DUCTBNK 4IN SH40 3X4 W/3- 2IN 15 PRI NET
14105726	DB4INSH403X4W3-3IN15	DUCTBNK 4IN SH40 3X4 W/3- 3IN 15 PRI NET
14105724	DB5INSH403X4W3-2IN15	DUCTBNK 5IN SH40 3X4 W/3- 2IN 15 PRI NET
14105727	DB5INSH403X4W3-3IN15	DUCTBNK 5IN SH40 3X4 W/3- 3IN 15 PRI NET

THESE MODULES HAVE MULTIPLE CU'S THAT ARE ASSOCIATED WITH THEM AND ARE DETERMINED BY CONTRACT LABOR BID UNITS

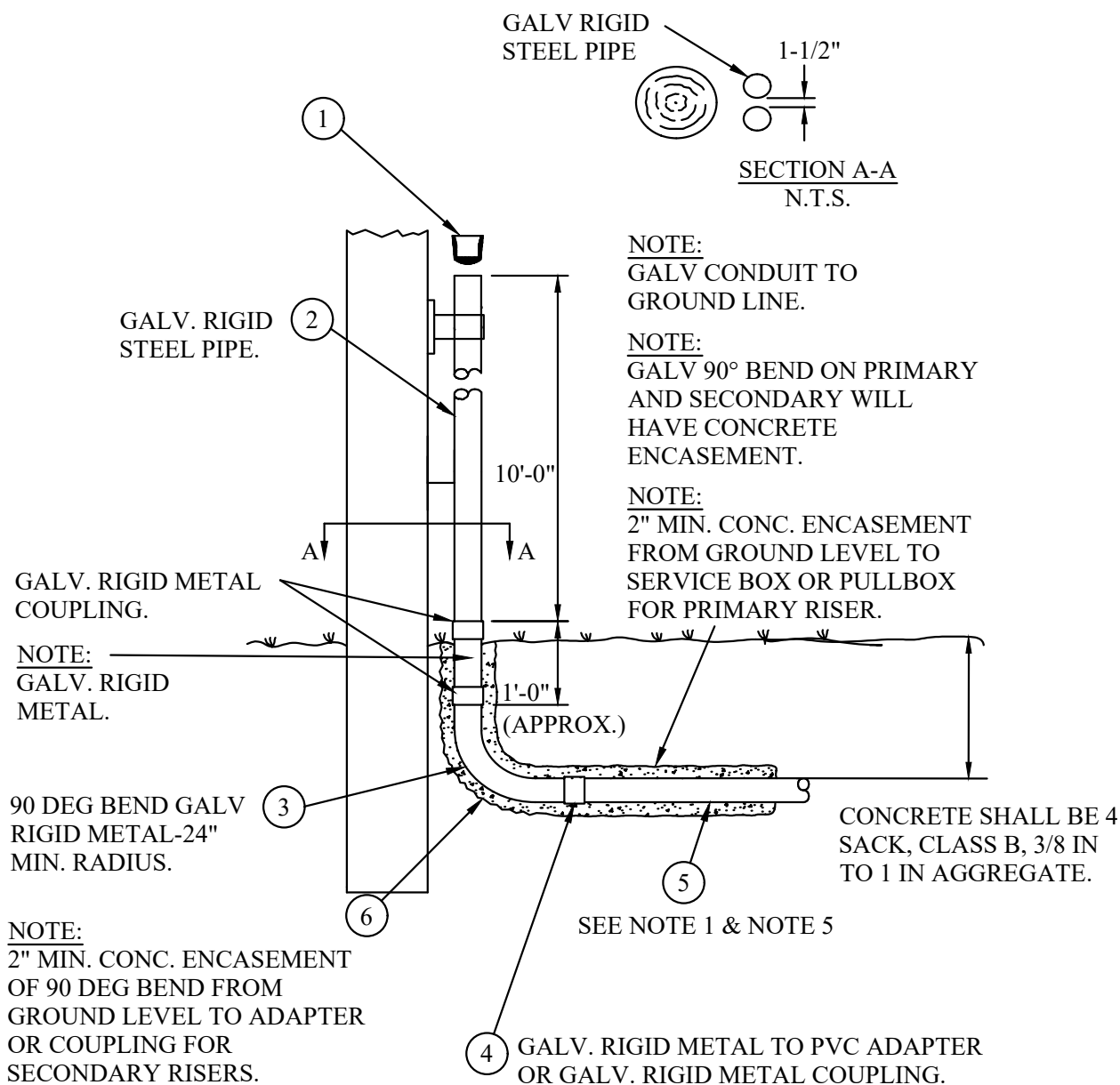


SCH 40
14105823 4IN W/3-2IN
14105824 5IN W/3-2IN
14105826 4IN W/3-3IN
14105827 5IN W/3-3IN

NOTES:

1. SEE PAGE 1419-20 FOR NETWORK TRENCH DETAILS.
2. ALWAYS USE SPACERS WHEN CONDUIT IS INSTALLED IN A STACKED CONFIGURATION.
3. ALWAYS ENCASE ALL CONDUITS WITH 2000 PSI CONCRETE.
4. ALWAYS USE TYPE PVC SCHEDULE 40 FOR ALL STREET CROSSINGS.

CU-REF	CU-ID	CU-DESCRIPTION
14105823	DB4INSH404X4W3-2IN19	DUCTBNK 4IN SH40 4X4 W/3- 2IN 19 PRI NET
14105826	DB4INSH404X4W3-3IN19	DUCTBNK 4IN SH40 4X4 W/3- 3IN 19 PRI NET
14105824	DB5INSH404X4W3-2IN19	DUCTBNK 5IN SH40 4X4 W/3- 2IN 19 PRI NET
14105827	DB5INSH404X4W3-3IN19	DUCTBNK 5IN SH40 4X4 W/3- 3IN 19 PRI NET



1410-60-01

NOTE:

1. TYPE, SIZE & NUMBER OF CONDUITS, SIZE TO SERVICE BOX OR PULLBOX, & INSTALLATION SPECIFICATIONS SHALL BE DETERMINED BY AUSTIN ENERGY DESIGN.
2. CUSTOMER SHALL ENSURE THAT THE RISER CONDUIT IS PLUMB WITH POLE AND HAS THE PROPER STAND OFF OF 4".
3. PRIMARY RISER: TOP OF CONDUIT SHALL BE A MIN. OF 30" BELOW GRADE.
SECONDARY RISER: TOP OF CONDUIT SHALL BE A MIN. OF 24" BELOW GRADE.
4. SERVICE BOX/PULLBOX AND RISER CONDUIT SHALL BE INSPECTED BY AUSTIN ENERGY, CIVIL INSPECTION SECTION OR AUSTIN ENERGY WORK MANAGEMENT.
5. CONDUIT IN WHICH THE CUSTOMER/ELECTRICIAN INSTALLS THE WIRE SHALL BE INSPECTED BY THE DEVELOPMENT REVIEW & INSPECTION DEPARTMENT, ELECTRIC INSPECTION SECTION. (PVC CONDUIT SHALL BE SCHEDULE 40.)
6. FIRST PULLBOX OR MANHOLE TO BE MINIMUM OF 5' FROM POLE.

CU-REF	CU-ID	CU-DESCRIPTION
14106020A	CONDTMRISSGL2INE	COND TERM RISER SGL 2IN EAST
14106020B	CONDTMRISSGL2INW	COND TERM RISER SGL 2IN WEST
14106020C	CONDTMRISSGL2INN	COND TERM RISER SGL 2IN NETWORK
14106021A	CONDTMRISPAR2INE	COND TERM RISER PARALLEL 2IN EAST
14106021B	CONDTMRISPAR2INW	COND TERM RISER PARALLEL 2IN WEST
14106021C	CONDTMRISPAR2INN	COND TERM RISER PARALLEL 2IN NETWORK
14106022A	CONDTMRISSGL3INE	COND TERM RISER SGL 3IN EAST
14106022B	CONDTMRISSGL3INW	COND TERM RISER SGL 3IN WEST
14106022C	CONDTMRISSGL3INN	COND TERM RISER SGL 3IN NETWORK
14106023A	CONDTMRISPAR3INE	COND TERM RISER PARALLEL 3IN EAST
14106023B	CONDTMRISPAR3INW	COND TERM RISER PARALLEL 3IN WEST
14106023C	CONDTMRISPAR3INN	COND TERM RISER PARALLEL 3IN NETWORK
14106024A	CONDTMRISSGL4INE	COND TERM RISER SGL 4IN EAST
14106024B	CONDTMRISSGL4INW	COND TERM RISER SGL 4IN WEST
14106024C	CONDTMRISSGL4INN	COND TERM RISER SGL 4IN NETWORK
14106025A	CONDTMRISPAR4INE	COND TERM RISER PARALLEL 4IN EAST
14106025B	CONDTMRISPAR4INW	COND TERM RISER PARALLEL 4IN WEST
14106025C	CONDTMRISPAR4INN	COND TERM RISER PARALLEL 4IN NETWORK
14106026A	CONDTMRISPAR5INE	COND TERM RISER PARALLEL 5IN EAST
14106026B	CONDTMRISPAR5INW	COND TERM RISER PARALLEL 5IN WEST
14106026C	CONDTMRISPAR5INN	COND TERM RISER PARALLEL 5IN NETWORK

THIS DRAWING IS FOR REFERENCE ONLY.

PRIME AND CEMENT - WELD (GLUE) ALL CONDUIT JOINTS.
PRIMER AND CEMENT SHALL COMPLY WITH ASTM F656 AND
ASTM D2565 RESPECTIVELY.
CAP ALL CONDUIT STUBS.
PLUG ALL UNOCCUPIED CONDUITS AT A SUBSTRUCTURE.

