422 MUNI CONSTRUCTION SPECIFICATION FOR PRECAST REINFORCED CONCRETE BOX CULVERTS AND BOX SEWERS IN OPEN CUT

422.01 Scope

ADD in the following:

Specification shall also include requirement for sheet piling used as cut off walls.

422.05 Materials

422.05.13 Bedding

DELETE all paragraphs:

ADD in the following:

Bedding shall be as specified in Contract Documents.

422.05.14 Backfill

DELETE all paragraphs:

ADD in the following:

Backfill shall be as specified in Contract Documents.

422.05.15 Cover

DELETE all paragraphs:

ADD in the following:

Cover shall be as specified in Contract Documents.

ADD in the following subsection:

422.05.16 Sheet Piling

Sheet Piling CSA G40.21 300 w, “Z” Series - Z55, interlocking.

422.07 Construction

422.07.06 Foundations

DELETE second paragraph:

ADD in the following:

Unsuitable or unstable material shall be removed as specified in Contract Documents.

422.07.13 Clay Seal

DELETE in its entirety.

ADD in the following:

Clay seal shall be as per OPSD 802.095 and shall be placed at each end of the culvert.

422.07.14 Geotechnical Testing

DELETE entire subsection.

ADD in the following subsection:

422.07.16 Sheet Piling

Sheet piling shall be installed at both ends of the box culvert. The sheet piling shall be driven from the bottom of the culvert to 2 metres below. Sheet piling shall be placed ensuring the sheet piling does not extend beyond the culvert ends.

The width of the sheet piling shall extend beyond the outer edges of the box culvert by the width of the thickness of the culvert wall or the width of the bedding limits, whichever is greater.

ADD in the following subsection:

422.07.17 Steel Straps

Once the box units have been installed to the specified alignment and grade, steel straps shall be secured on opposite exterior vertical faces of each box section to tie the sections together in accordance with the manufacturers specifications.

422.09 Measurement for Payment

422.09.01 Actual Measurement

422.09.01.01 Precast Reinforced Concrete Box Culverts

ADD in the following subsection:

422.09.01.02 Sheet Piling

Measurement of sheet piling left in place shall be a product of horizontal and vertical direct distance from end to end as shown on contract drawings.

422.10 Basis of Payment

422.10.02 Clay Seal - Item

DELETE in its entirety.

ADD in the following:

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment, and material to do the work and shall be included in the unit price for box culvert.

ADD in the following subsection:

422.10.08 Sheet Piling

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment, and material to do the work.

ADD in the following subsection:

422.10.09 Steel Straps

Steel straps shall be included in the unit price for box culvert.