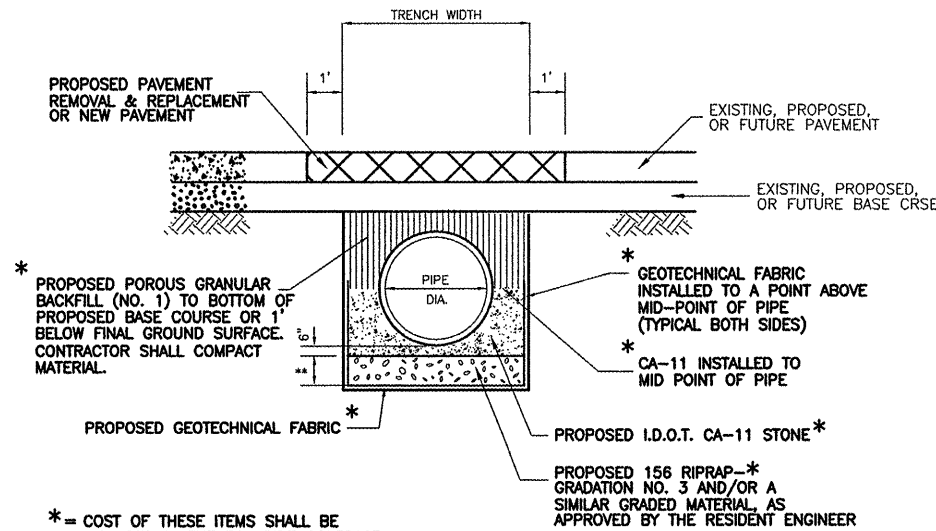


**PROPOSED TYPICAL SECTION - PIPE TRENCH**  
(ALL PROPOSED PIPES)

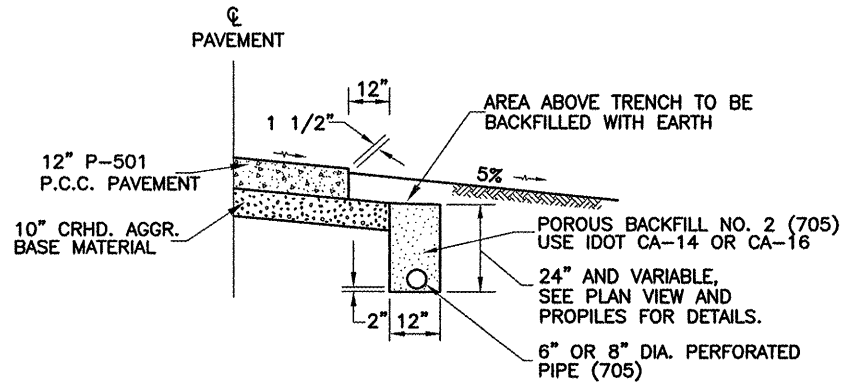


\* = COST OF THESE ITEMS SHALL BE INCLUDED IN THE 701 PIPE CONTRACT UNIT PRICES

**GENERAL PIPE NOTES:**

- GROUND WATER IS EXPECTED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING, TO THE SATISFACTION OF THE ENGINEER, TO INSURE PROPER INSTALLATION OF PIPES. NO ADDITIONAL COMPENSATION BEYOND THE CONTRACT UNIT PRICES WILL BE ALLOWED FOR DEWATERING COSTS.
- COMPACTED BEDDING AND BACKFILL MATERIALS SHALL BE REQUIRED AS SHOWN IN DETAIL. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

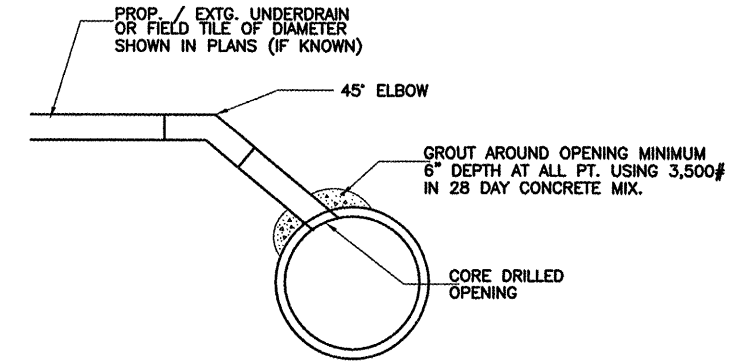
PIPE DIA.	TRENCH WIDTH	PVMT. RW/ML WIDTH	** FOUNDATION DEPTH
6" / 8"	3.75'	6'	10"
12"	4.17'	6.5'	10"
18"	4.75'	7'	10"
ELLIPTICAL 24" EQUIV	5.87'	8'	18"
24"	5.33'	7.5'	18"
30"	5.92'	8'	18"
42"	7.08'	9.5'	18"



**NOTES :**

- PIPE UNDERDRAIN MATERIAL SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 705 AND THE SPECIAL PROVISIONS.
- PIPE UNDERDRAIN TO BE INSTALLED BEFORE PLACEMENT OF PAVEMENT & CRUSHED AGGR.
- COST OF POROUS BACKFILL NO. 2 (CA-14 OR CA-16), BENDS AND FITTINGS TO BE INCLUDED IN THE UNIT PRICE FOR UNDERDRAINS.
- NO ADDITIONAL COMPENSATION SHALL BE MADE FOR CHANGES IN ELEVATIONS MADE BY THE RESIDENT ENGINEER.
- PIPE UNDERDRAIN TO BE INSTALLED ON BOTH SIDES OF PAVEMENT.

**PERFORATED PIPE UNDERDRAIN DETAIL**

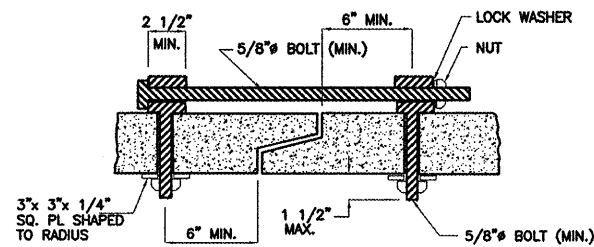
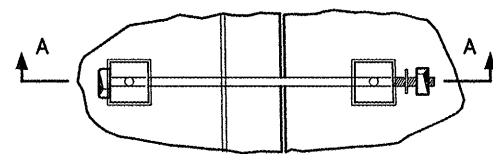


**DETAIL OF PIPE UNDERDRAIN / FIELD TILE OUTLET INTO STORM SEWER OR PIPE CULVERT**

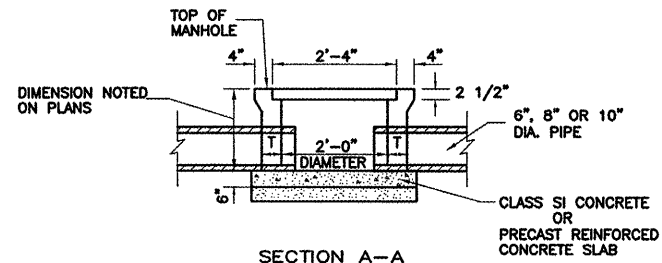
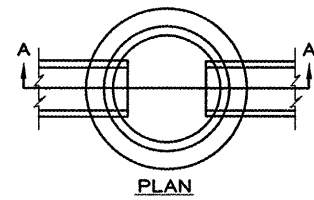
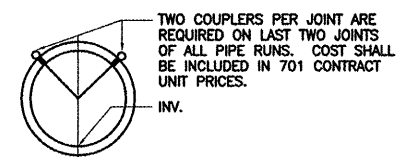
**NOTES :**

COST OF NEW PIPE, ELBOW AND GROUTING TO BE INCLUDED IN CONTRACT UNIT PRICES. ANY DAMAGE TO EXISTING STORM SEWER, TILE, OR PIPE CULVERT SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT ENGINEER AT THE CONTRACTOR'S EXPENSE.

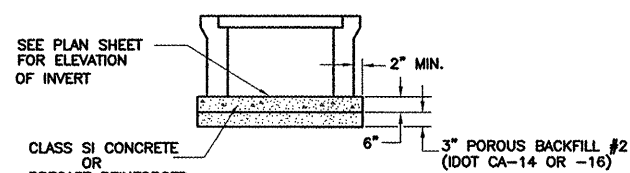
**PROPOSED PIPE COUPLERS**



**SECTION A-A**



**SECTION A-A**



**BASE DETAIL**

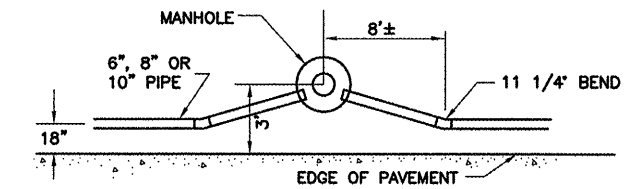
**DETAIL OF MANHOLE SPECIAL ITEM 751570**

ALTERNATE MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE RINGS	5"
CAST IN PLACE CONCRETE	6"

**NOTES :**

- PRECAST REINFORCED CONCRETE RINGS AND MANHOLE FRAMES SHALL BE LAID IN FULL MORTAR BEDS WITH FLUSH JOINTS.
- MORTAR MIX SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 3 PARTS SAND.
- ALL CONCRETE SHALL HAVE A MIN. STRENGTH AT 28 DAYS OF 3500 P.S.I.
- THE CONTRACT UNIT PRICE FOR MANHOLE SPECIAL SHALL INCLUDE FURNISHING AND INSTALLING THE FRAME AND LID, THE SAND CUSHION, AND COMPACTING THE BACKFILL MATERIAL. SEE PLAN SHEETS FOR FRAME AND LID TYPE.

MODIFIED IDOT STANDARD 602301



COST OF FITTINGS TO BE INCLUDED IN THE UNIT PRICE FOR UNDERDRAINS.

**PLAN VIEW OF MANHOLE SPECIAL ADJACENT TO EDGE OF PVMT.**