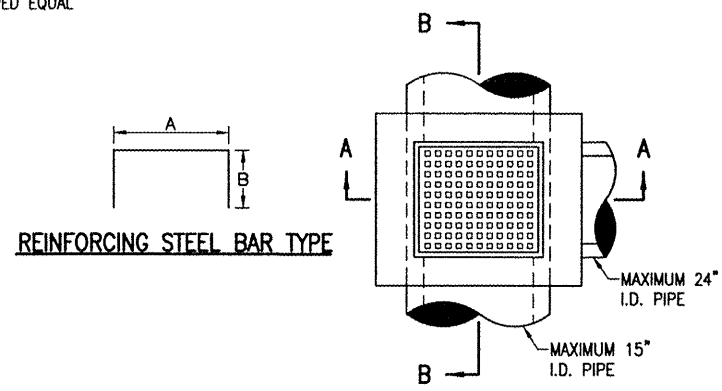


CAST IRON FRAME AND COVER

NEENAH R-6013, DEETER 1810,
EAST JORDAN 2790-6 OR
APPROVED EQUAL

INSPECTION HOLE NOTES

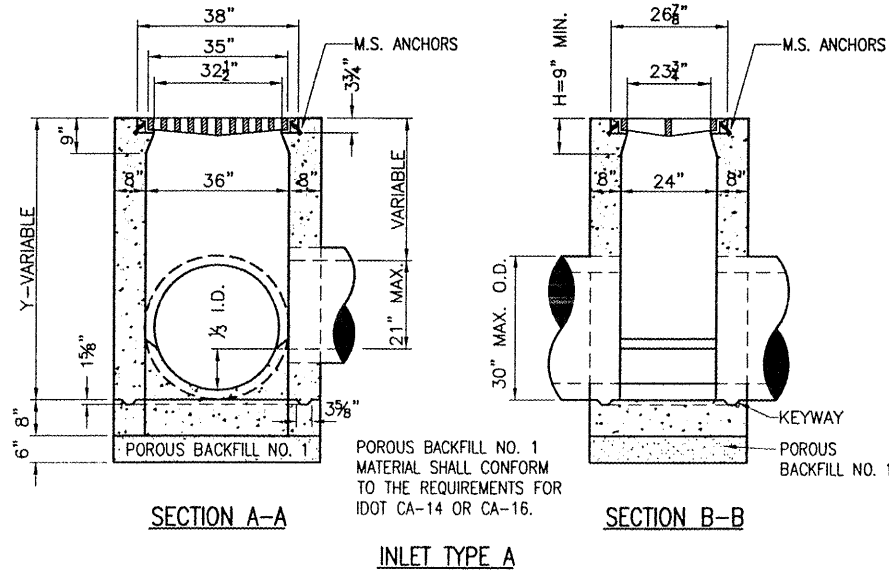
- DIAMETER OF PIPE AS SPECIFIED.
- TOP OF INSPECTION HOLES SHALL BE 2" ABOVE FINISH GROUND LINE AT LOCATION SHOWN ON PLANS.
- 1/2" CHAMFER TO BE USED ON ALL EXPOSED EDGES OF INSPECTION HOLES.
- THE CONCRETE SHALL BE STRUCTURAL PORTLAND CEMENT CONCRETE (NON- REINFORCED)



REINFORCING BARS SCHEDULE					
TYPE	QUANTITY PER INLET	DIMENSIONS		SIZE	APPROX. WT. OF BARS IN INLET
A		A	B	#5	
A	2	3'-4"	2'-4"	#5	16.7

INLET NOTES

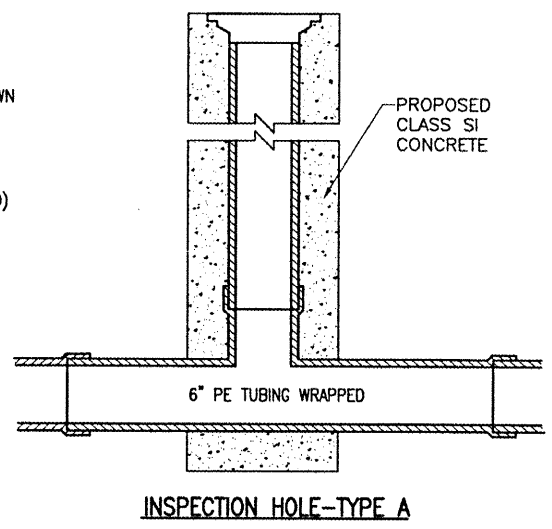
- INLET TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE PER INLET SHALL INCLUDE THE FRAME, GRATE AND STEPS IN PLACE AND COMPLETE PER UNIT.
- 1/2" CHAMFER TO BE USED ON ALL EXPOSED CORNERS OF INLETS. BARS TO BE INSTALLED 2" FROM FACE OF WALLS.
- THE FRAME AND GRATE SHALL BE NEENAH R-3475-A, DEETER 2425-E.
- "H" SHALL BE EQUAL TO THE PROPOSED PAVEMENT THICKNESS AND NOT LESS THAN THE ATTACHED MINIMUMS. TYPE A _____ 9" MINIMUM.
- INLET STEPS SHALL BE NEENAH R-1980-1. 12" TO 15" C.C. STEPS TO BE INSTALLED WHEN Y IS GREATER THAN 5' COST. THE COST OF THE STEPS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH INLET.



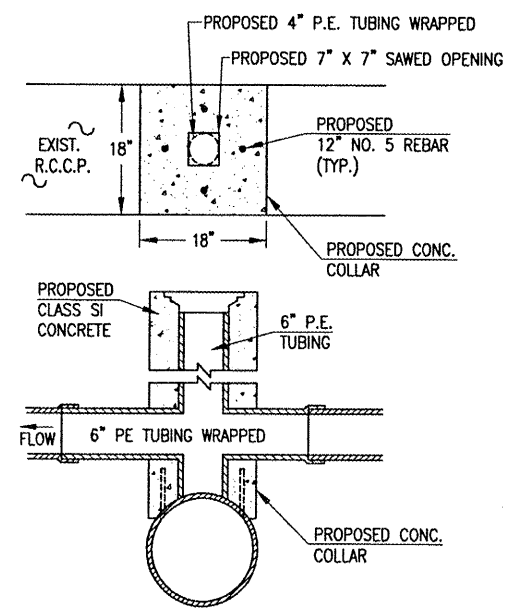
SECTION A-A

INLET TYPE A

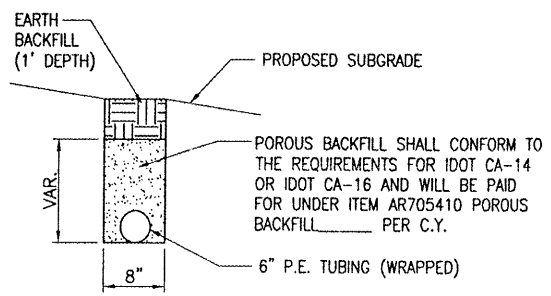
SECTION B-B



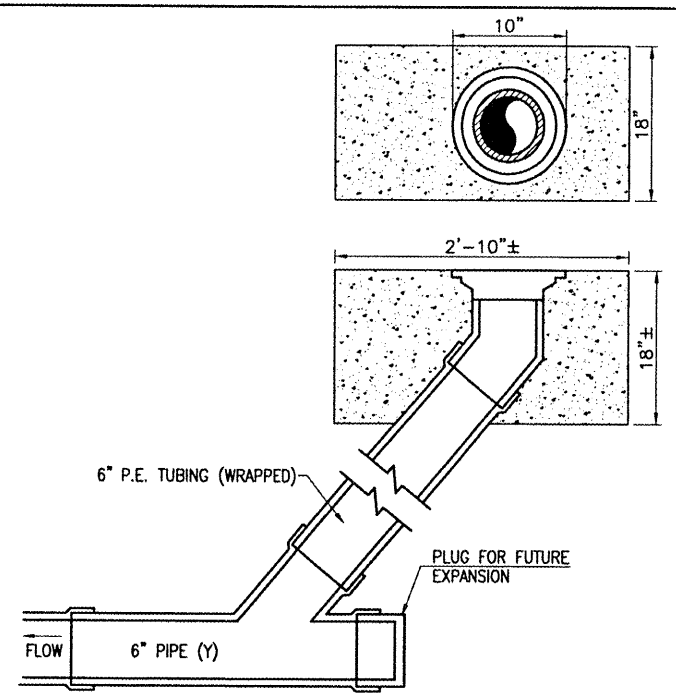
INSPECTION HOLE-TYPE A



TYPE B INSPECTION HOLE DETAIL
"NOT TO SCALE"



UNDERDRAIN DETAIL
NOT TO SCALE



CLEANOUT HOLE

705-UNDERDRAIN NOTES:

- THE PROPOSED UNDERDRAIN PIPE WILL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 705 "PIPE UNDERDRAINS FOR AIRPORTS" AS STATED ON PAGE 109 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.
- THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING 6" P.E. TUBING (WRAPPED) AND UNDERDRAIN INSPECTION HOLES AT THE LOCATIONS AND TO THE GRADES SHOWN ON THE CONSTRUCTION PLANS.
- 705-3.3 LAYING AND INSTALLING PIPE. REVISE THIS SECTION AS FOLLOWS:
"PIPE DRAINS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. THE PIPE SHALL BE BEDDED IN THE UNDERLYING MATERIAL TO A DEPTH NOT LESS THAN 10 PERCENT OF THE EXTERNAL DIAMETER OF THE PIPE, AND WHERE TRENCHING IS REQUIRED, THE TRENCH SHALL HAVE A WIDTH OF NOT LESS 12 IN. THE BOTTOM OF THE TRENCH SHALL BE COMPACTED IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.
- JOINTS AND FITTINGS MAY BE ASSEMBLED WITHOUT GASKETS OR SOLVENT CEMENT IF THE JOINT IS SAND TIGHT AND THE SPIGOT ENTERS THE SOCKET NOT LESS THAN 1/3 OF THE SOCKET DEPTH FOR SOLVENT CEMENT JOINTS AND FULL-DEPTH FOR ELASTOMERIC GASKET JOINTS.
- NO PIPE SHALL BE PLACED IN THE TRENCH UNTIL IT AND THE PREPARED FOUNDATION HAVE BEEN APPROVED BY THE RESIDENT ENGINEER. THE PIPE SHALL BE LAID SO THAT THE FLOWLINE WILL BE AT THE GRADE SHOWN ON THE PLANS OR ESTABLISHED BY THE RESIDENT ENGINEER. THE PERMISSIBLE MINIMUM COVER OVER A PIPE SHALL BE 6 IN.
- LAYING OF PIPES SHALL COMMENCE AT THE OUTLET END AND PROCEED TOWARD THE INLET END WITH THE PIPES TRUE TO LINE AND GRADE.
- THE ENDS OF THE PIPE SHALL BE CAREFULLY CLEANED BEFORE THEY ARE PLACED, AND SHALL BE PLACED TO AVOID UNNECESSARY HANDLING ON THE FOUNDATION. AS EACH LENGTH OF PIPE IS LAID, THE ENDS OF THE PIPE SHALL BE PROTECTED TO PREVENT ANY MATERIAL.
- LONGITUDINAL LAPS SHALL BE PLACED AT THE SIDES AND SEPARATE SECTIONS OF PIPE SHALL BE JOINED WITH TIGHTLY-DRAWN, APPROVED CONNECTING BANDS.
- THE TRENCH SHALL BE BACKFILLED WITH SELECT MATERIAL, MEETING THE APPROVAL OF THE ENGINEER, PLACED IN 8 IN. LAYERS, LOOSE MEASUREMENT, AND COMPACTED TO THE ENGINEER'S SATISFACTION. THE PIPE UNDER PROPOSED PAVEMENT, PLUS 10 FT ON EITHER SIDE, WILL BE BACKFILLED WITH POROUS BACKFILL TO THE ORIGINAL GROUND ELEVATIONS OR TO THE SUBGRADE ELEVATION IF THE FILL HAS BEEN CONSTRUCTED PRIOR TO THE INSTALLATION."
- 705-3.6 BACKFILLING; ADD THE FOLLOWING TO THIS SECTION:
"THE EDGE DRAIN TRENCH WILL BE BACKFILLED WITH POROUS BACKFILL IN ACCORDANCE WITH THE DETAIL ON THE CONSTRUCTION PLANS. THE POROUS BACKFILL WILL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATION SET FORTH FOR GRANULAR MATERIAL BACKFILL."
- THE PROPOSED UNDERDRAIN PIPE WILL BE PAID FOR UNDER ITEMS:
AR705410 POROUS BACKFILL _____ PER C.Y.
AR705526 6" PERFORATED UNDERDRAIN W/SOCK _____ PER L.F.
AR705530 UNDERDRAIN INSPECTION HOLE _____ PER EACH

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT

 EAST ALTON, ILLINOIS
 I.L. PROJ.: ALN-3825 A.I.P. PROJ.: 3-17-0002-B42

Project No. 83706RWD-0800	Scale N/A	Date 05/12/08
Drawn R-131DRN.DWG	Scale N/A	Date 05/12/08
Checked	Scale N/A	Date 05/12/08
Reviewed	Scale N/A	Date 05/12/08
Approved	Scale N/A	Date 05/12/08

HANSON
 Hanson Professional Services Inc.
 1526 South Sixth Street
 Springfield, Illinois 62703-2886
 Offices Nationwide

RUNWAY SAFETY AREA IMPROVEMENTS
 PROPOSED DRAINAGE DETAILS AND NOTES

FEB 10, 2009 4:48 PM HAGL000382
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