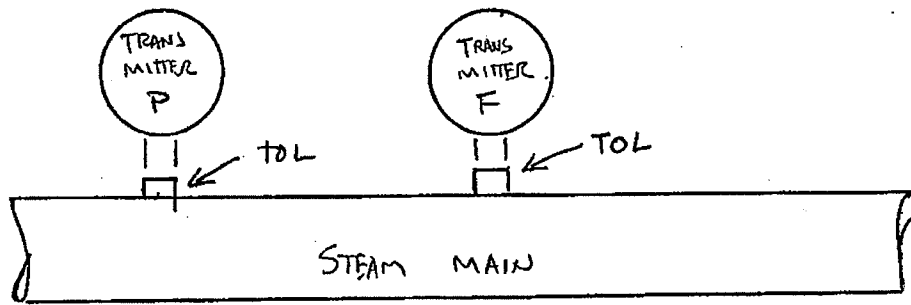
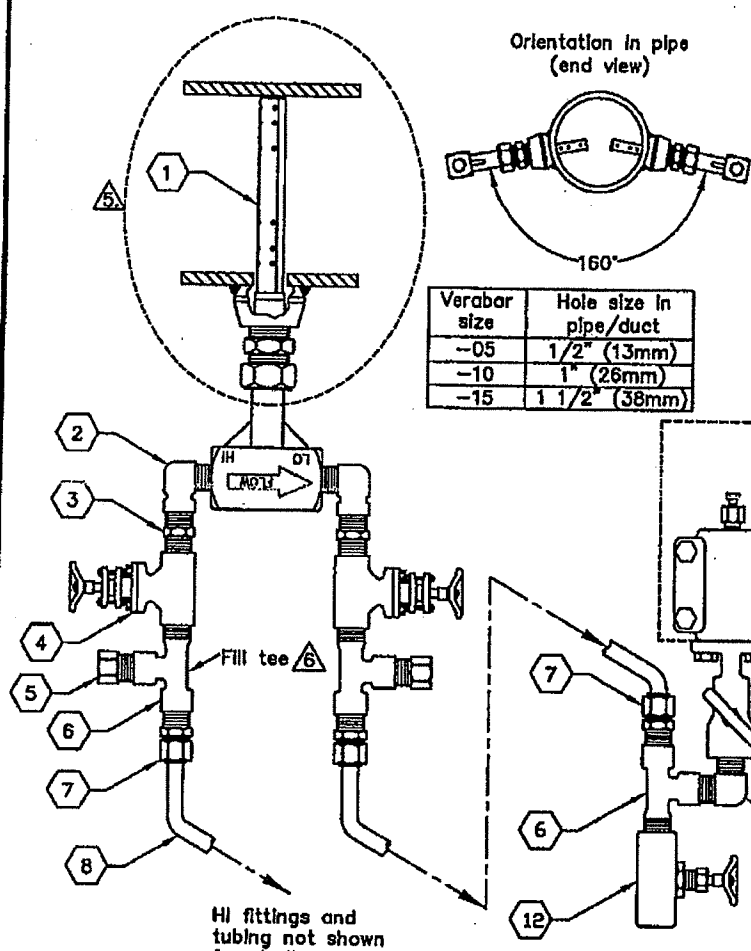
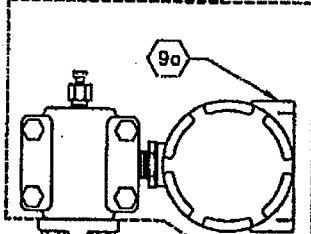
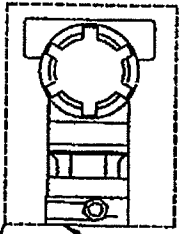


We planned to do this:



AMENDMENT REQUIRED THIS :

 <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th>Verabar size</th> <th>Hole size in pipe/duct</th> </tr> </thead> <tbody> <tr> <td>-05</td> <td>1/2" (13mm)</td> </tr> <tr> <td>-10</td> <td>1" (26mm)</td> </tr> <tr> <td>-15</td> <td>1 1/2" (38mm)</td> </tr> </tbody> </table> <p style="text-align: center;">HI fittings and tubing not shown for clarity</p>	Verabar size	Hole size in pipe/duct	-05	1/2" (13mm)	-10	1" (26mm)	-15	1 1/2" (38mm)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">FLUID TYPE STEAM</td> <td style="text-align: center;">TRANSMITTER REMOTE</td> </tr> <tr> <td colspan="2" style="text-align: center;">PIPE OR DUCT ORIENTATION HORIZONTAL</td> </tr> <tr> <td style="text-align: center;">VERABAR HEAD R</td> <td style="text-align: center;">SYSTEM CODE(S) TR, MRS</td> </tr> <tr> <td colspan="2" style="text-align: center;">INSTALLATION RECOMMENDED</td> </tr> </table> <div style="display: flex; justify-content: space-around; margin-top: 20px;">   </div> <p style="text-align: right; margin-right: 50px;">If coplanar transmitter</p>	FLUID TYPE STEAM	TRANSMITTER REMOTE	PIPE OR DUCT ORIENTATION HORIZONTAL		VERABAR HEAD R	SYSTEM CODE(S) TR, MRS	INSTALLATION RECOMMENDED	
Verabar size	Hole size in pipe/duct																
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VERABAR HEAD R	SYSTEM CODE(S) TR, MRS																
INSTALLATION RECOMMENDED																	

NOTES

1. Mounting on the bottom of the pipe as shown is recommended. Contact Veris if an alternate installation is required.
2. DP transmitter to be located at sufficient distance to allow for cooling to meet transmitter specification. Typical cooling rate is 100°F per foot (55°C per 300mm). DP transmitter to be located at least 18in. (450mm) below the fill tees. The vent valves are to point up if traditional style transmitter.
3. Tubing to slope continuously downward to the DP transmitter at least 4in. (100mm) per foot (300mm) and shall be free of peaks, dips, or sharp bends that would allow entrapped air to accumulate.
4. Tubing bends to be made with a tube bender and shall have a minimum radius of three times the tubing OD.

5 Verabar model V100 shown, other models available.

6 Fill tees to be at the same height.

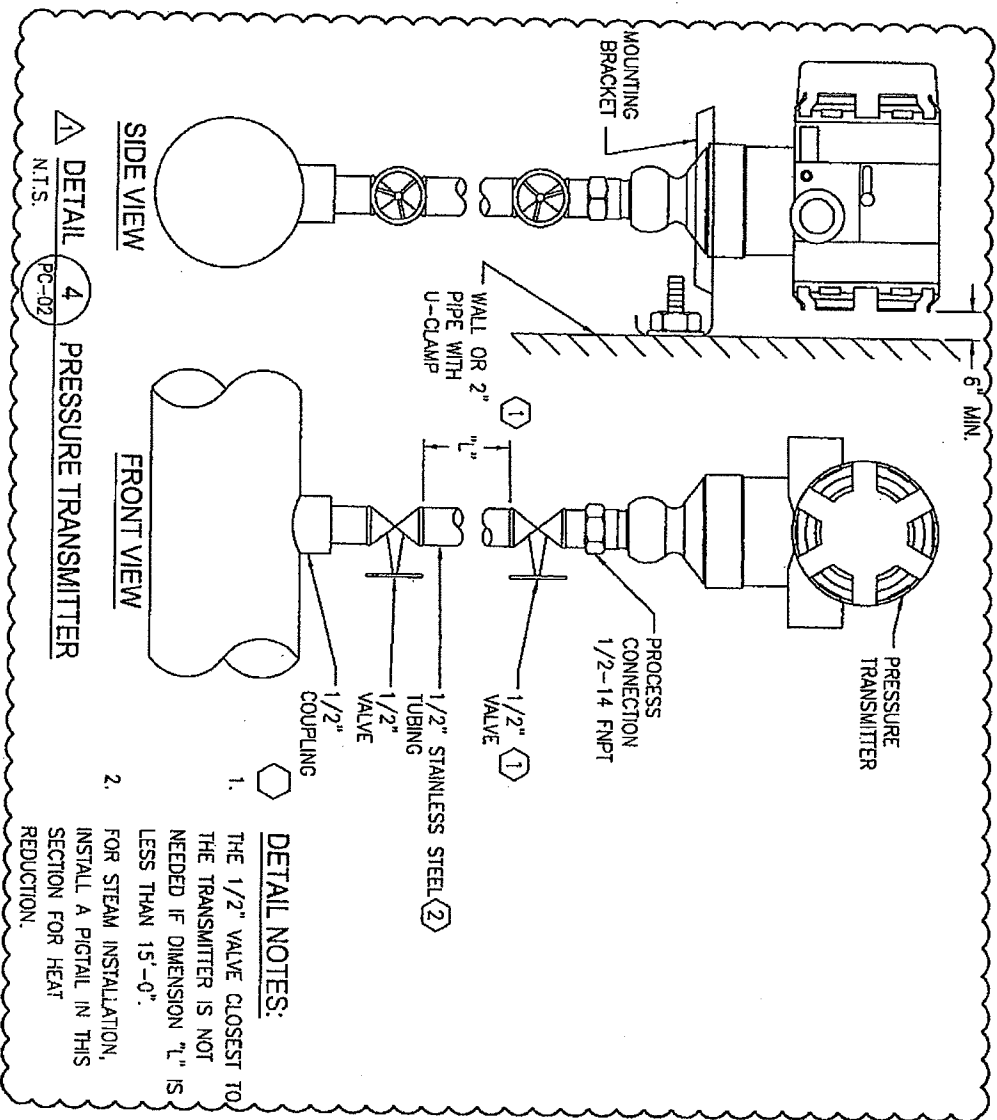
VERIS, inc.

6315 Monarch Park Place Phone: (303) 652-8550
 Niwot, CO 80503 USA Fax: (303) 652-8552
www.veris-inc.com

**RECOMMENDED
INSTALLATION DRAWING**

DATE 10-14-03	DWG NO. FFS-002
SCALE N.T.S.	REV C PAGE 1 OF 1

AND THIS:



DETAIL NOTES:

1. THE 1/2" VALVE CLOSEST TO THE TRANSMITTER IS NOT NEEDED IF DIMENSION "L" IS LESS THAN 15'-0".
2. FOR STEAM INSTALLATION, INSTALL A PIGTAIL IN THIS SECTION FOR HEAT REDUCTION.

REV.	DATE	DESCRIPTION	BY	CHK
1	7/27/10	AMENDMENT NO. 1		
FOSDICK & HILKER CONSULTING ENGINEERS 308 THE SPOT, SUITE 50 TULSA, OK 74106-1540 TEL: (918) 438-1100 FAX: (918) 438-1101 WWW.FHENGINEERS.COM				
DOYON UTILITIES 1000 West 10th Avenue, Suite 200 Anchorage, Alaska 99501 (907) 562-1000 (907) 562-1001			DATE	REVISION
PROJECT NO. 101255, 101256, 101257 FORT WAINWRIGHT, AK. UTILITY MOUNTING			10/12/10	1. NTS
UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE			10/12/10	2. OK
DU PROJECT NO. 101255, 101256, 101257			10/12/10	3. JT
Drawing No.			PC-08	

CHANGE PROPOSAL COVERS CIRCLED ITEMS

		FLUID TYPE STEAM	TRANSMITTER REMOTE
		PIPE OR DUCT ORIENTATION HORIZONTAL	
		VERABAR HEAD R	SYSTEM CODE(S) TR, MRS
		INSTALLATION RECOMMENDED	

ITEM	QTY	DESCRIPTION
1	1	Verabar sensor with pipe mounting hardware
2	2	1/2" street elbow
3	2	1/2" NPT hex nipple
4	2	1/2" FNPT gate valve (full port)
5	2	1/2" MNPT plug
6	4	1/2" street tee
7	4	1/2" MNPT x 1/2" OD tube fitting
8	as req	1/2" OD tubing
9a	1	Differential pressure transmitter, traditional style
9b	1	Differential pressure transmitter, coplanar style
10	1	3 or 5 valve manifold (1/2" FNPT X flanged)
11	2	1/2" male elbow
12	2	1/2" FNPT needle valve

NOTES

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⚠ Verabar model V100 shown, other models available.

⚠ Fill tees to be at the same height.

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**RECOMMENDED
INSTALLATION DRAWING**

DATE 10-14-03	DWG NO. FFS-002
SCALE N.T.S.	REV C PAGE 1 OF 1

DETAIL 4 PRESSURE TRANSMITTER

DETAIL NOTES:

1. THE 1/2" VALVE CLOSEST TO THE TRANSMITTER IS NOT NEEDED IF DIMENSION "L" IS LESS THAN 15'-0".
2. FOR STEAM INSTALLATION, INSTALL A PIGTAIL IN THIS SECTION FOR HEAT REDUCTION.

DETAIL NOTES:

THE 1/2" VALVE CLOSEST TO THE TRANSMITTER IS NOT NEEDED IF DIMENSION "L" IS LESS THAN 15'-0".

FOR STEAM INSTALLATION, INSTALL A PIGTAIL IN THIS SECTION FOR HEAT REDUCTION.

9/16/2010 Meeting @ DPW

336A Hit bad dirt just east between Aircraft Storage & 2077. @ Gave update rev. of existing Sampling & Analysis Plan to ADGC & DPW

336B Behind sched. due to delayed access to bldg svc. entrance & Montgomery rd. closure duration Temporary Heating plans are underway

Also missing about 100' of 16" & 8" mains to East of H5-5-6 so will cap inside it. No affect to Heating Bldg. will mean parking lot area will be dug next year
June 30 completion!

336C No issues slow digging from perma-frost

FTW-348 Coordination with Bill Farrel on Elec. duct bank that wraps from west side of fire Stel in around N. side.

Attachment A-2
DU Furnished WDS Piping Materials
Aircraft Parts Storage - FTW 336A

[illegible]



PO Box 80688
Fairbanks, AK. 99708

Telephone (907) 488-5983
Fax (907) 488-9830

October 21, 2010

Tunista Arctic Rim/TBI, LLC
301 Calista Court, STE-A
Anchorage, AK 99518

Attn: Jason Bergman
RE: Utility Service Extension to Aircraft Parts Storage - FTW 336A

HC Contractors is billing material costs associated with the extra materials needed to complete the above project. Time associated with correspondence, quantifying, and procuring additional materials is factored into P&O.

Total	\$9,466.00
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Please see the attached sheet and contact the undersigned if you have any questions.

Thank You,

Travis Malin
Project Manager

ITEM SUMMARY & ANALYSIS SHEET

PROJECT - Utility Service Extension to FTW336A

OF EXISTION - Includes labor and additional materials to be installed per Attachment #

#1111111

[illegible]

ITEM	DESCRIPTION	HOURS	UNIT	LABOR AND MATERIALS	EQUIPMENT	SMALL TOOLS (OWNER'S)	PERMANENT IMPROVEMENTS	OVERHEAD (10% OF TOTAL)	TOTAL
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[illegible]