



# TOWN OF SMITHFIELD

*"The Ham Capital of the World"*

## INVITATION FOR BID

### ADDENDUM # 3

**IFB # 20-003**

April 24, 2020

Town of Smithfield

310 Institute Street

Smithfield, VA 23430

<https://www.smithfieldva.gov/>

### Relining of Well # 8A

Sealed bids subject to the conditions and instructions contained herein, will be received at the office of the Purchasing Agent listed below, until the time and date shown below (local prevailing time), for furnishing the services described herein.

**SCOPE OF WORK Relining Well # 8A:** Contractor shall provide all labor, superintendence, materials, tools, equipment, testing, project safety, and other ancillary items necessary as identified to complete the relining of well #8A as further described, herein.

**REVISED Bid Due prior to: 3:00 PM., May 12, 2020**

**Contract Officer:** \_\_\_\_\_

Michael Coburn, Sr., Purchasing Agent, [Michael.coburn@isleofwightus.net](mailto:Michael.coburn@isleofwightus.net)

**\*\* ONE COMPLETE ELECTRONIC SUBMITTAL IS REQUESTED \*\***

In compliance with this invitation for bids, and subject to all the conditions thereof, the undersigned offers, if this bid is accepted within ninety (90) calendar days from the date of the opening, to furnish all of the services on which prices are quoted, at the price set opposite each item, to be performed as specified herein. The undersigned certifies he has read, understands, and agrees to all terms, conditions, and requirements of this bid, and is authorized to contract on behalf of firm named below.

Company

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City / State / \_\_\_\_\_

Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

FAX No.: \_\_\_\_\_

E-mail: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### ADDENDUM # 3

The following question and answer are made part of this Invitation to Bid and are published herein to improve understanding of the time required to complete this project:

**Question:** Is a well construction record, GW2, available?

**Answer:** Yes, see attached record.

**Question:** Will there be any water samples required to be taken before or after relining is complete? If so, what samples would you like collected?

**Answer:** Yes, the water samples that will be required are as follows:

- Two (2) Water Bacteria Test that pass after work is completed
- One (1) Sand Content performed after work has been completed
- One (1) Turbidity Test performed after work has been completed

**Question:** Do you have information on the Pump Assembly?

**Answer:** Yes, see attached.

**Question:** Has a camera survey been performed on the well to see if the top of the 10"inch casing is centered inside the 20" casing?

**Answer:** Television Inspection Report is attached.

**Question:** Will a yield and drawdown test be required?

**Answer:** Yes, a yield and drawdown test will be required as follows:

- 4 hour constant rate
- 1 hour step test

**Question:** Is the well inside a building or outside?

**Answer:** Well # 8A is located inside a building.

**Question:** How large of an area will we have available to stage up materials and store equipment?

**Answer:** Significant area will be designated for stage up material and storing equipment. Area can also be evaluated during site.

**Question:** Has the due date for final questions been extended as well? I may have some questions after we make a site visit.

**Answer:** The due date for final questions has been extended to May 5<sup>th</sup>; however, the closing date for bids remains May 12<sup>th</sup>.

**Also attached to this Addendum is a revised BID FORM with the current due date of May 12, 2020**

Town of Smithfield  
 Smithfield, Va  
 Isle of Wight Co.  
 Well # 8A  
 Job # 66241-7

11-91  
 Reg 65

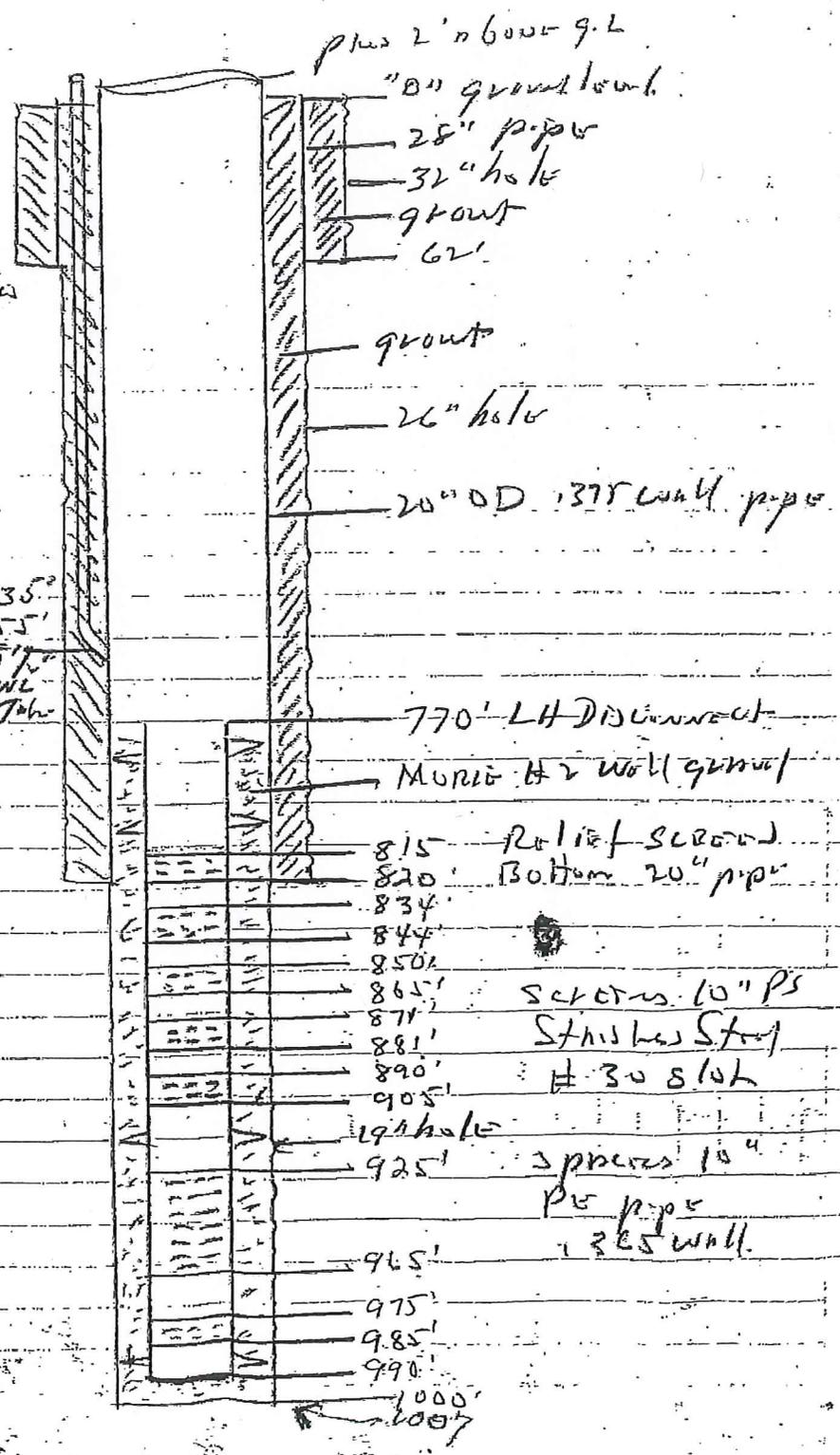
Drilled by

Synova Hydrodynamics  
 P.O. Box 27186  
 Richmond, VA 23261  
 804-643-2727

Drillers

John Mitchell  
 Ted Oliver  
 Kyril Brookwood

No Scale - Normals



7935'  
 655'

1/2" WL Tab

770' LH Disconnect

Mud pit & 2 well grout

815 Relief screen

820 Bottom 20" pipe

Screens 10" PS

Stakes steel

#30 slot

3 pieces 10" pipe

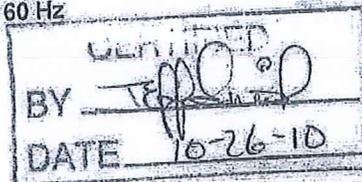
365 wall

1000'  
 600'

**PUMP DATA SHEET Turbine 60 Hz**

Company: Sydnor Hydro Inc  
 Name: PO#57957 (Smithfield Well Pumps)  
 Date: 10/26/10

Goulds SO# 581877



**Pump:**

Size: 12FDLC (10 stages)  
 Type: Lineshaft  
 Synch speed: 1800 rpm  
 Curve: E6412FFPC0  
 Specific Speeds:

Speed: 1770 rpm  
 Dia: 7.72 in

Ns: 4255

**Pump Notes for Standard Sizes:**

Suction Size-10" Discharge Sizes-6", 8", 10". Curves are certified for water at 60°F only. Consult factory for performance with any other fluid.

**Vertical Turbine:**

Bowl size: 11.6 in  
 Max lateral: 0.75 in  
 Thrust K factor: 15 lb/ft

**Search Criteria:**

Flow: 1700 US gpm

Head: 450 ft

**Fluid:**

Water  
 SG: 1  
 Viscosity: 1.105 cP  
 NPSHa: --- ft

Temperature: 60 °F  
 Vapor pressure: 0.2563 psi a  
 Atm pressure: 14.7 psi a

**Motor:**

Standard: NEMA

Size: 250 hp  
 Speed: 1800

Sizing criteria: Max Power on Design Curve

**Pump Limits for Standard Construction:**

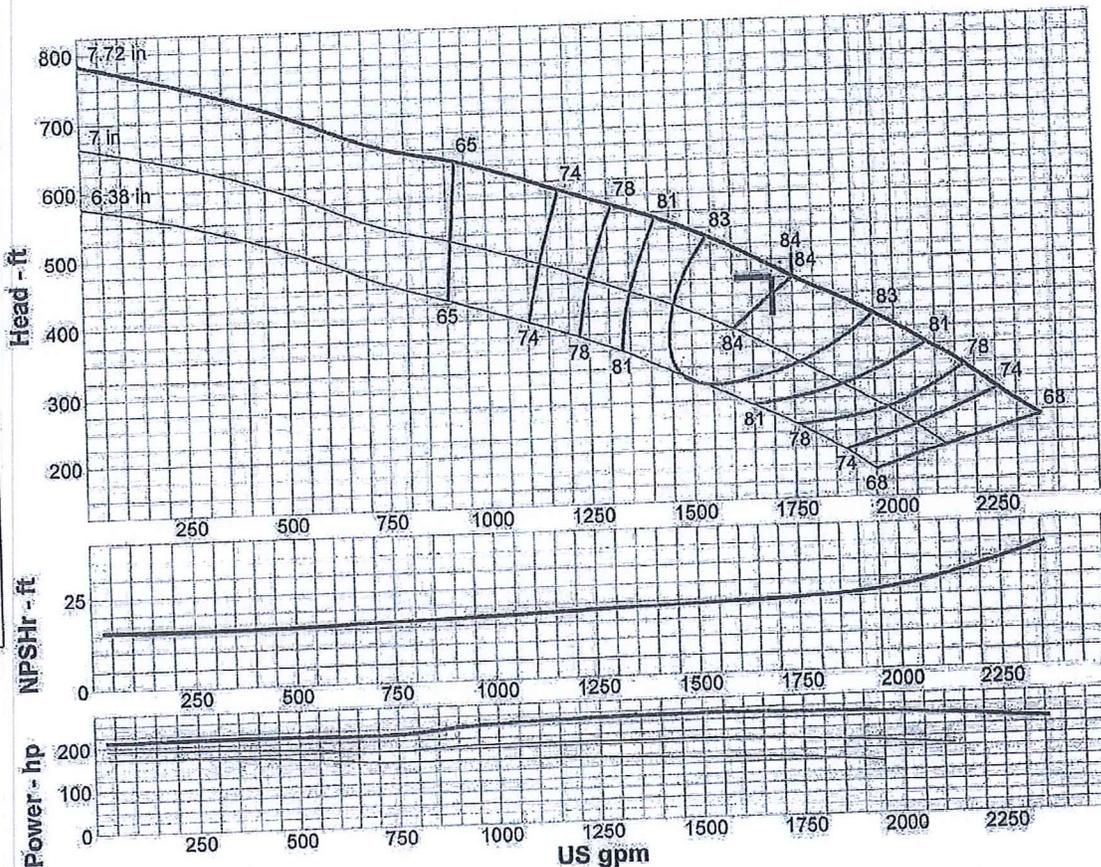
Temperature: 120 °F  
 Sphere size: 0.81 in

Pressure: 440 psi g

--- Data Point ---  
 Flow: 1700 US gpm  
 Head: 466 ft  
 Eff: 83.8%  
 Power: 238 hp  
 NPSHr: 19.8 ft

-- Design Curve --  
 Shutoff Head: 785 ft  
 Shutoff dP: 339 psi  
 Min Flow: --- US gpm  
 BEP: 84% eff  
 @ 1750 US gpm  
 NOL Pwr: 240 hp  
 @ 1540 US gpm

-- Max Curve --  
 Max Pwr: 240 hp  
 @ 1540 US gpm



**Performance Evaluation:**

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
2040	1770	365	81.6	230	23.7
1700	1770	466	83.8	238	19.8
1360	1770	552	79.4	239	18.5
1020	1770	616	68.4	231	17.4
680	1770	667	53.4	213	16.3

Selected from catalog: Goulds Lineshaft 60HZ Vers: 3.34

Sydnor Hydro Inc  
 PO#57957 (Smithfield Well Pumps)

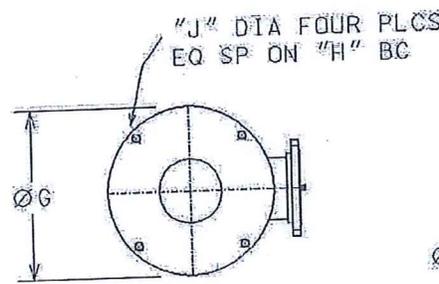
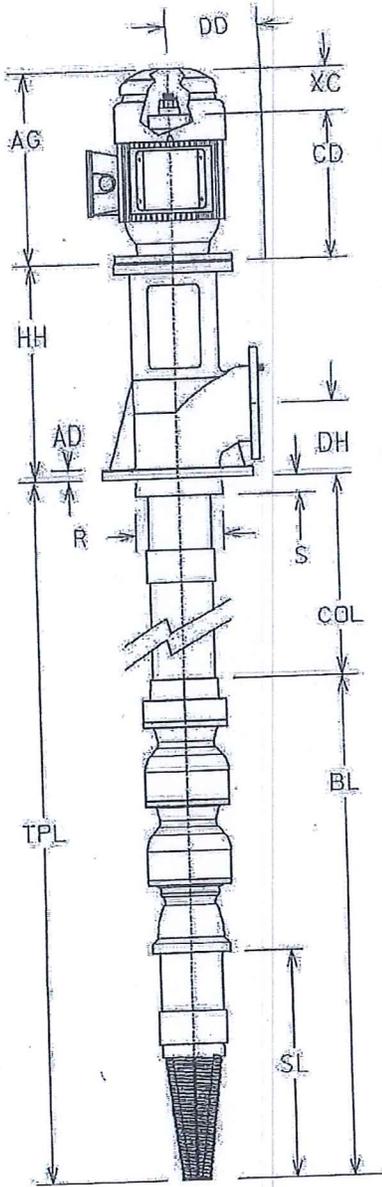
**DIMENSIONAL OUTLINE**  
 DWT-CFTM  
 10 Stage 10x12FDLC



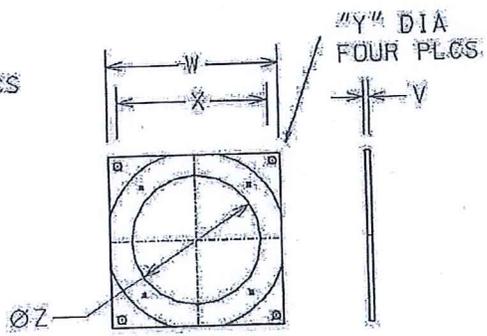
**Pump Data**

AD:	1.37	Size:	12FDLC
AG:		Stages:	10
BD:	16.5		
BL:	165.88	BowlShaft:	1.94"
CD:		LineShaft:	1.69"
CL:	N/A	LineShaft Type:	Open
COL:	350.00'	Column:	Standard
DD:	14.69	Column:	10" Threaded
DH:	10.56	Bearing Spacing:	10 feet
G:	25.00	Section Length:	10 feet
H:	22.75	Head:	F:Cast
HH:	28.25	Flange (Disch.):	10"-250# FF
J:	0.75	Suct.:	
R:	14.62	Seal:	Packing
S:	2.38	Strainer:	Cone
SL:	27.25	SubBase:	Yes
TPL:	363.8'		
UG:	N/A		
V:			
W:	26.00		
X:	23.00		
XC:			
Y:	0.88		
Z:	18.00		
MAX:	11.60		

CERTIFIED  
 BY *[Signature]*  
 DATE 10-26-10



DISC HEAD



SOLE PLATE

**Hydraulic Data**

Flow (gpm):	1700
Pump Head (ft):	456.3
TDH (ft):	466.0
Speed (rpm):	1770
Fluid:	Water
Temperature (F):	60
Viscosity:	1.105
Spec: Grav:	1

**Miscellaneous**

Thrust At Design (lb):	9504
Thrust At Shutoff (lb):	14289
Pumping Level (in):	0

**Weight**

Pump (lb):	17621
Motor (lb):	3600
Total (lb):	21221

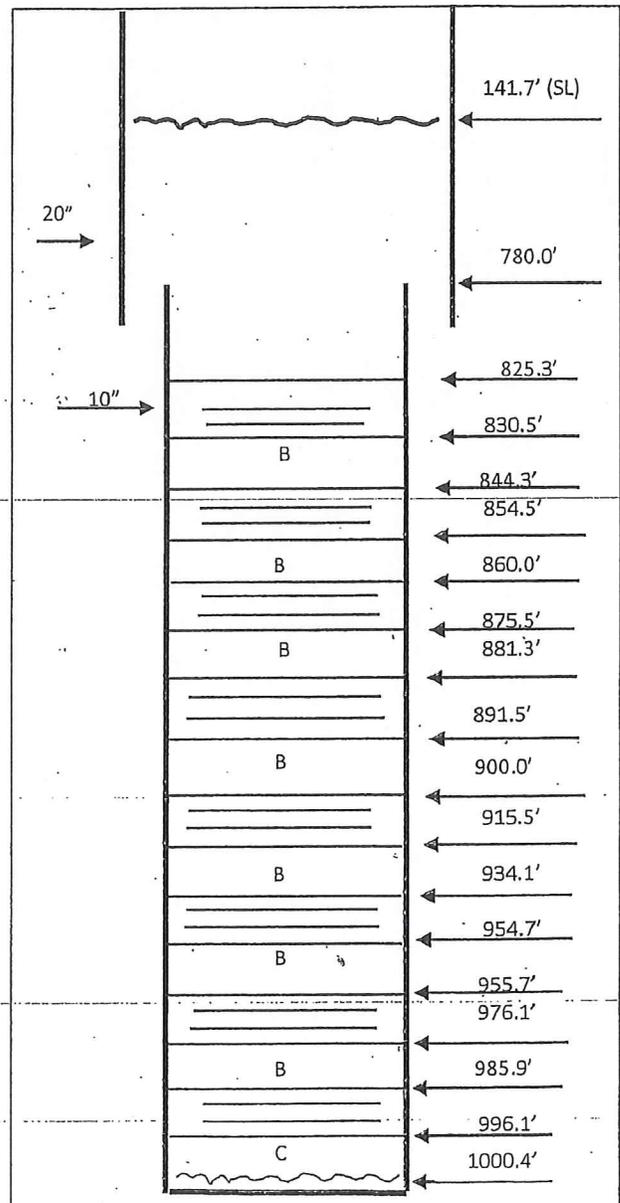
**Motor Data**

Model:	TEFC Prem Eff
Make:	USEM
HP:	250
RPM:	1800
Type:	VHS
Efficiency:	94.1
Frame:	449TP
Ratchet:	NRR

## TELEVISION INSPECTION REPORT

CUSTOMER	Town of Smithfield
WELL	#8A
LOCATION	Smithfield WTP
JOB NUMBER	H7665
DATE	10/25/17

DATA	
REFERENCE POINT	12" below TOC
Water Supply:	
Hose: Poly:	Hose
Water Source:	Pump House
<b>OUTER CASING</b>	
Diameter:	20"
Material:	Steel
Bottom of Outer:	N/A
Joints: Threaded:	Welded
Welded:	
Other:	
<b>INNER CASING DIA.</b>	
DEPTH TO TOP	780.0'
Material:	Steel
LR	J Hook
LR	LR
<b>OTHER</b>	
TOP OF SCREEN	825.3'
Reduction (Y/N):	No
Diameter:	10"
Wire Wrap:	Wire Wrap
Louver:	
Other: Bronze, SS or Rock	SS
Major Features:	
BOTTOM OF SCREEN	996.1'
BOTTOM OF WELL	1007'
According to	Pump Step Test Report
Depth Mat'l Encountered	1000.4'
STATIC LEVEL	141.7'
PUMP SETTING	350'
Original Specific Capacity	
Current S.C.	
OTHER COMMENTS:	Moderate to heavy pitting/build up on outer casing. Moderate pitting / build up on inner casing & blanks. Clean screens. Minor to light buildup in areas. Many potential holes in black steel, especially outer casing.



Pre-Redevelopment  
 Post-Redevelopment

N.T.S

**Town of Smithfield**  
**IFB # 20-003**  
**Relining of Well # 8**

*BID FORM*

**Due Date:** May 12, 2020

**Time:** 3:00 p.m. local time

**Total Lump Sum Bid:** \$ \_\_\_\_\_

Bidder has examined the site and locality where the Work is to be performed, the legal requirements (federal, State and local laws, ordinance, rules and regulations) and has made such independent investigations as Bidder deems necessary to fully inform himself as to the conditions affecting cost and progress of performance of the Work.

Bid shall remain valid for a minimum period of sixty (60) days after the day of Bid Opening; Bidder agrees to disposition of Bid Security as specified in the Instruction to Bidders.

Terms of payment on work performed with a good and correct invoice shall be Net 30 days with a 5% retainage.

Not more than fifty percent (50%) of the work shall be subcontracted and the amount of any subcontractors proposed by the bidder in excess of ten percent (10%) of the bid price shall be identified on the Bid Form.

Subcontractor: \_\_\_\_\_

Subcontractor: \_\_\_\_\_

Bidder accepts all terms and conditions of the Contract Documents and has included the following with his BID FORM (please check v):

\_\_\_\_\_ "Anti-collusion/Nondiscrimination/Drug Free Workplace" clause

\_\_\_\_\_ Proof of Authority to Transact Business in Virginia form

I certify by my signature below that I have received the documents associated with this Bid and understand that the review for completeness of these documents and the understanding and comprehension of the specifications is solely my responsibility; based on this, by my signature below, I waive all rights to future claims against the Town of Smithfield that the documents were incomplete or not understandable.

My signature below certifies that this Bid is not the result of or affected by, any act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under Section 18.2-498.1 et. seq. of the Code of Virginia (1950, as amended). Furthermore, I understand that fraudulent bidding is a crime under the Virginia Governmental Frauds Act, the Virginia Government Bid Rigging Act, the Virginia Anti-Trust Act, and federal law and can result in fines, prison sentences, and civil damage awards.

I certify that the bidder represented herein is eligible to bid with respect to all applicable sections of State and Local Government Conflict of Interest Act, Section 2.2-3100 et. seq. of the Code of Virginia (1950, as amended).

I agree to abide by all conditions of this Bid and certify that I am authorized to sign this Bid.

Virginia Contractor No. \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print \_\_\_\_\_