

CARSON CITY PURCHASING & CONTRACTS
201 North Carson Street Suite 3
Carson City, NV 89701
775-283-7137/ FAX 887-2107
<http://www.carson-city.nv.us/Index.aspx?page=998>

NOTICE TO CONTRACTORS

BID #0910-181

**Carson City Municipal Well #50 and 24
Inch Water Line Construction
Labor Commissioner PWP# CC-2010-236
Public Works Project No. 4.0817
Engineer's Estimate: \$900,000.00**

April 13, 2010

Addendum No. 1

Please make the following additions/changes to the above referenced project.

Make the following changes to the Bid Documents:

1. A. Specification 6015. The deadline for the pre-bid submittal has been extended to Thursday, April 15, 2010 at 5:00 p.m. Pre-bid submittals must be provided in a minimum of three (3) copies and be delivered to Carson City Purchasing and Contracts Department, 201 North Carson Street, Suite 3, Carson City, Nevada 89701.

B. **SEALED BIDS** must be submitted in a sealed envelope which shall be clearly marked with title and number of this Bid Document to Carson City Purchasing and Contracts Department, 201 North Carson Street, Suite 3, Carson City, Nevada 89701, by not later than 10:00 a.m. on April 21, 2010. Bids received after the date and time set for receipt will be **REJECTED** and returned to the bidder unopened.

C. **BID OPENING** will be held publicly at 10:10 a.m. on April 21, 2010, at 201 North Carson Street, Suite 3, Carson City, Nevada 89701. Bidders, their representatives, and all other interested persons may be present during the bid opening.

2. A. Specification 1005, replace page TS-1 with the attached TS-1 through TS-1.1

Make the following changes to the Plans:

3. **Sheet C1/23. Plan-Production Well #50;**

A. Station 9+51.6 to 9+65.0. This segment of 12" water line shall be PVC.

4. **Sheet C4/23. Plan-Bigelow Drive;**

A. Station 25+71. Connect to existing 10" main with (1) hot tap saddle.

Clarifications:

5.
 - A. Please see attached information related to the new pump and motor that Carson City will be providing to the contractor.
 - B. Please see attached detail for the stabilization of trenches with unsuitable soil as described in BP.14.
 - C. The well casing is currently installed.
 - D. Engineered Fluid, Inc. is the only manufacturer so far to provide a pre-bid submittal. (618-533-1351)
 - E. The directional bore is, at the discretion of the City, an option to the trenching and casing.
 - F. The City has decided that a pre-bid meeting would not be required.

Attachments:

**Tech Specs 1005 Operating and Maintenance
Pump and Motor Information**

End of Addendum 1

**CARSON CITY PURCHASING & CONTRACTS
TECHNICAL SPECIFICATIONS**

2.

DOCUMENT No. 1005 OPERATING AND MAINTENANCE INFORMATION (2/10/10)

1 General:

1.1 Operating and maintenance information shall be provided for all mechanical and electrical equipment and shall consist of the names and addresses of the manufacturers, the nearest representative of the manufacturer, and the nearest supplier of the manufacturer's equipment and parts, as well as all items as listed in section 2.9 of this specification.

2 Transmittal Procedure:

2.1 Provide a transmittal form for the Operation and Maintenance Manual. Submit (1) paper copy of the specified operating and maintenance information until approval has been given. The information shall be organized in binders in numerical order by the specification number assigned in the project manual, plus a suffix of "O&M". The binders shall be provided with a table of contents and tab sheets to permit easy location of desired information.

2.2 If a manufacturer's standard brochures and manuals are used to describe operating and maintenance procedures, such brochures and manuals shall be modified to reflect the model or series of equipment used on this project. Extraneous material shall be crossed out neatly or otherwise annotated or eliminated.

2.3 Acceptable submittals will be retained with the transmittal form returned with a request for two electronic copies on compact disk. Provide complete electronic copies of the entire O&M manual in PDF format. The entire O&M manual information for each specification section shall be included in a single PDF. This is required for all O&M manuals associated with this Project.

2.4 Deficient submittals will be returned along with transmittal form which will be marked to indicate deficient areas.

2.5 Identify resubmittals with the original number, plus a suffix letter starting with "A."

2.6 Submit Operation and Maintenance Manuals printed on 8-½" x 11" inch size high quality paper with standard three-hole punching and bound in stiff metal hinged binder constructed as a three-post style. Provide binders with titles. Tab each section of manuals for easy reference with plastic-coated dividers. Provide index for each manual.

2.7 Reduce drawings or diagrams bound in manuals to an 8½" x 11" inch or 11" x 17" inch size. However, where reduction is not practical to ensure readability, fold large drawings separately and place in vinyl envelopes which are bound into the binder. Identify vinyl envelopes with drawing numbers.

2.8 Transmittal Content:

1. Submission of Operation and Maintenance Manuals is applicable to but not necessarily limited to:
 - a. Equipment such as meters, valves, pumps and feed system controls, electrical panels, and instrumentation.
 - b. Equipment used with electrical motor loads (pumps)
 - c. Specialized equipment including valves and instrumentation and control system components for process systems such as meters, recorders, and transmitters.
 - d. Valves and actuators.

2.9 Prepare operation and maintenance manuals which include, but are not necessarily limited to the following detailed information, as applicable:

- a. Equipment function, normal operating characteristics, limited operations.
- b. Assembly, disassembly, installation, alignment, tolerances, adjustment, and checking instructions.
- c. Operating instructions for start-up, routine and normal operation, regulation and control, shutdown, and emergency conditions.

CARSON CITY PURCHASING & CONTRACTS TECHNICAL SPECIFICATIONS

2.

- d. Lubrication and maintenance instructions (including schedules).
- e. Guide to “troubleshooting”.
- f. Parts list (including material of construction) and predicted life of parts subject to wear.
- g. Outline, cross-section, and assembly (exploded view) drawings; engineering data; and electrical diagrams, including elementary diagrams, wiring diagrams, connection diagrams, word description of wiring diagrams and interconnection diagrams.
- h. Test data and performance curves.
- i. A list of recommended spare parts with a price list.
- j. Copies of installation instructions, parts lists or other documents packed with equipment when delivered.
- k. Instrumentation or tag numbers relating the equipment back to the Contract Documents.
- l. Safety instructions.
- m. ISO identification numbers for bearings.
- n. List of specialty tools required and availability.
- o. List weight of overall assemblies and individual weights of major individual components.
- p. List of vendors and who to contact for warranty work.
- q. List of fastener grades.
- r. Copy of warranty, if applicable.

3 Payment:

3.1 Monies retained from progress payments made to Contractor will not be released until acceptable operating and maintenance information is delivered to Construction Manager for Carson City.

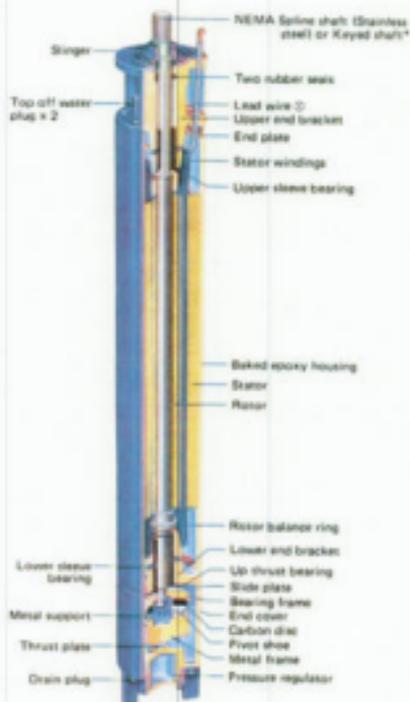
4 Field Changes:

4.1 Following the acceptable installation and operation of an equipment item, the item's instructions and procedures shall be modified and supplemented by Contractor to reflect any field changes or information requiring field data.

END OF DOCUMENT 1005

8-10" REWINDABLE WATER-TIGHT MOTORS

2 Pole 3600/3000 RPM

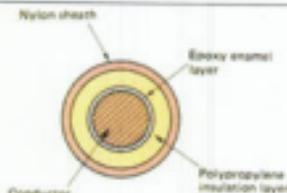


⊗ 8-10" motors do not have a factory installed ground lead.

*See dimensional data for correct variations.

40-200 HP (30 kW - 150 kW) 3Ø
2P 3,600/3,000 RPM (60/50 Hz)

Description of Water Tight Insulation Wire



The reliability of submersible motors depends on their insulation characteristics. CentriPro 8-10" motors are the result of years of continuous research and development. Our rewindable water-tight motors feature excellent insulation characteristics thanks to their new patented, water-tight, insulated magnet wire.

The insulation material is a specially developed denatured polypropylene applied over a special enamel layer. An external nylon sheath is applied over this polypropylene layer for extra mechanical protection. These three barriers are applied to copper conductors for complete insulation from the motor's cooling fluid. This insures that CentriPro motors will have an extremely long service life.

Standard Specifications

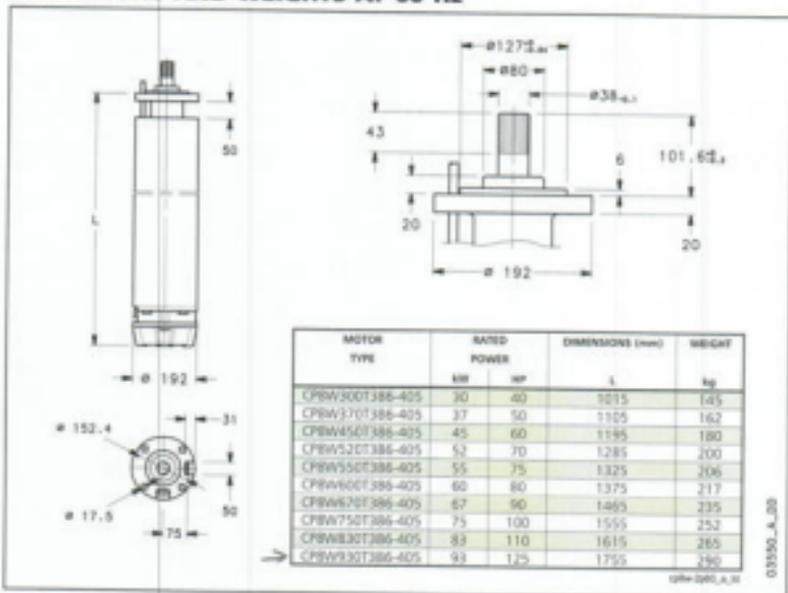
Cable Connection		Direct to Stator
Cable Length		200 inch (5 m)
Shaft	2P	Spined 40-150 HP (30-110 kW)
		Keyed 200 HP (150 kW)
Flange		NEMA Standard
Speed	60 Hz	2P 3600 RPM
	50 Hz	2P 3000 RPM

Water Environment

Minimum Flow Rate	0.5 ft./sec. (0.15 m/sec.)
pH Level	6.5 - 8
Maximum Temperature	77° F (25° C)

Service Factor

Service Factor Motor	1.15	1.0
	40-200 HP 2P	460V / 60 Hz

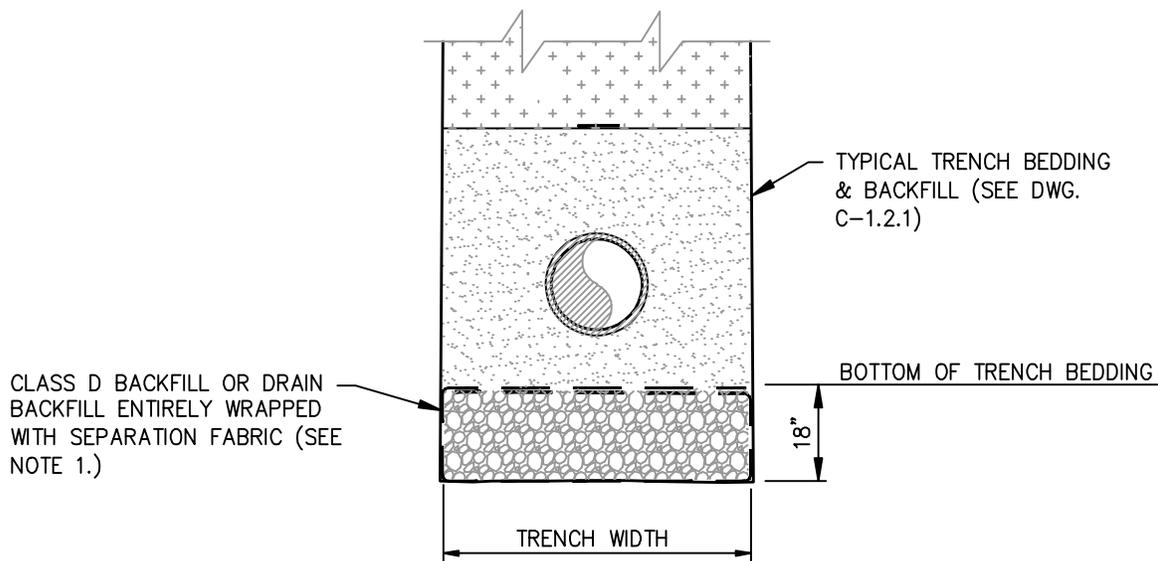
**CPBW SERIES MOTORS
DIMENSIONS AND WEIGHTS AT 60 Hz**

OPERATING CHARACTERISTICS AT 60 Hz

MOTOR TYPE	RATED POWER		RATED VOLTAGE	OPERATING CHARACTERISTICS AT RATED POWER							SERVICE FACTOR	SERVICE FACTOR ADPS	MAX WATER TEMP. °C	CABLE TYPE		
	HP	kW		V	A	rpm	s %	cosφ	T _{st}	T _{fl}				T _{max}	SP	YED
CPBW300T386 CPBW300T405	30	40	380	47.8	3430	82.0	0.82	5.50	1.04	2.22	1.15	78.0	25	10	6	5.5
			460	56.9	3470	81.0	0.83	5.50	1.04	2.22				10	4	
CPBW370T386 CPBW370T405	37	50	380	83.0	3490	82.5	0.82	5.71	1.39	2.21	1.15	95.6	25	16	6	5.5
			460	89.0	3470	81.0	0.83	52.6	1.04	2.23				10	6	
CPBW450T386 CPBW450T405	45	60	380	98.0	3495	84.0	0.83	5.5	1.28	2.22	1.15	113	25	16	10	5.5
			460	81	3470	82.0	0.83	4.98	0.98	2.22				16	6	
CPBW520T386 CPBW520T405	52	70	380	117	3485	83.0	0.82	5.66	1.31	2.22	1.15	133	25	25	10	5.5
			460	95.5	3475	82.5	0.83	5.56	1.06	2.22				111	16	
CPBW550T386 CPBW550T405	55	75	380	119	3490	84.0	0.84	5.72	1.35	2.22	1.15	137	25	25	10	5.5
			460	98	3470	83.0	0.84	5.44	1.06	2.24				113	16	
CPBW600T386 CPBW600T405	60	80	380	129	3480	84.0	0.84	5.15	1.29	2.21	1.15	150	25	25	16	5.5
			460	107	3480	83.0	0.85	5.07	1.04	2.23				124	16	
CPBW670T386 CPBW670T405	67	90	380	142	3485	84.5	0.85	5.36	1.21	2.22	1.15	168	25	35	16	5.5
			460	120	3475	83.0	0.85	5.18	1.03	2.23				138	25	
CPBW750T386 CPBW750T405	75	100	380	161	3490	84.5	0.84	5.50	1.30	2.22	1.15	186	25	35	16	5.5
			460	135	3480	83.0	0.85	5.04	1.01	2.32				156	25	
CPBW830T386 CPBW830T405	83	110	380	178	3500	84.5	0.84	5.04	1.10	2.22	1.15	207	25	35	16	5.5
			460	149	3475	82.5	0.85	4.79	0.97	2.28				176	25	
CPBW930T386 CPBW930T405	93	125	380	197	3495	84.5	0.85	4.68	1.31	2.22	1.15	230	25	50	25	5.5
			460	165	3475	82.5	0.86	4.6	1.02	2.2				195	25	

T_{st} - value between starting torque and nominal torque.

T_{max} - value between maximum torque and nominal torque.

CPBW-DW_A_03



SUBGRADE STABILIZATION

DETAIL

NTS

REFERENCE STD DWG C-1.2.1 FOR ADDITIONAL NOTES & DETAIL

NOTES:

1. FOR SUPPORT UNDER THE BEDDING AND PIPE IN UNSTABLE SOIL CONDITIONS, TYPE "D" BACKFILL OR DRAIN BACKFILL, WITH A SEPARATION FABRIC PLACED ENTIRELY AROUND THE DRAIN BACKFILL, AS SHOWN IN THE STABILIZATION DETAIL, MAY BE USED WITH THE APPROVAL OF THE CONSTRUCTION MANAGER.

2. CLASS "D" BACKFILL OR DRAIN BACKFILL, DOES NOT NEED TO BE WASHED, BUT SHALL BE FREE OF ANY ORGANIC IMPURITIES, CLAY LUMPS OR UNSTABLE SUBSTANCES.

CLASS "D" BACKFILL OR DRAIN BACKFILL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

<u>SIEVE SIZE:</u>	<u>PERCENT PASSING BY MASS:</u>
2 INCH	100
1 1/2 INCH	90-100
3/4 INCH	0-5

3. THE SEPARATION GEOTEXTILE FABRIC SHALL BE A NON-WOVEN FABRIC CONSISTING ONLY OF LONG CHAIN POLYMERIC FILAMENTS. THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS, RESISTANT TO ROT AND MILDEW, AND SHALL HAVE NO TEARS OR DEFECTS WHICH WILL ADVERSELY AFFECT OR ALTER ITS PHYSICAL PROPERTIES. PHYSICAL PROPERTIES FOR THE FABRIC ARE LISTED BELOW:

<u>PROPERTY</u>	<u>REQUIREMENT</u>	<u>TEST METHOD</u>
GRAB TENSILE STRENGTH, N	625	ASTM D 4632
GRAB ELONGATION AT BREAK, %	45 MIN., 115 MAX.	ASTM D 4632
PUNCTURE STRENGTH, N	220	ASTM D 4833
BURST STRENGTH, MPa	1.45	ASTM D 3786
TRAPEZOIDAL TEAR, N	180	ASTM D 4533
PERMITTIVITY, PER SECOND	0.10 - 0.15	ASTM D 4491
APPARENT OPENING SIZE, SIEVE SIZE, μm	106 - 300	ASTM D 4751
ULTRAVIOLET STABILITY, %	70	ASTM D 4355