

CITY OF SARASOTA, FLORIDA

APPENDIX A-4

ELECTRICAL, INSTRUMENTATION, AND CONTROLS
APPROVED MATERIAL LIST

PLEASE TYPE OR PRINT CLEARLY IN BLACK INK

Project Name: _____
Contract / Bid Number: _____ Work Assignment Number: _____
Contractor's Name: _____
Contractor's Address: _____
Contractor's Signature: _____

For City Use Only
(Refer to Section 01300 – Submittals)

Engineer: _____ Date: _____
Reviewed, No Comments: _____
Reviewed, Comments as Noted: _____
Reviewed, Comments Attached – Resubmit: _____
Rejected, Revise and Re-submit, Comments Attached: _____
Not Reviewed: _____
City Project Manager: _____ Date: _____
Comments:

APPENDIX A-4

ELECTRICAL, INSTRUMENTATION, AND CONTROLS
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With the submission of this document, the CONTRACTOR understands that the use of the following selected items, as individually indicated using an "X", is mandatory. The materials included in this list are approved for portable water service only.

Recommendations for Approved Alternates, using other items that are not contained within this Checklist, shall be initiated, and submitted by the CONTRACTOR, in accordance with Section 00800-General Provisions, to the CITY and the ENGINEER for review and approval at least ten (10) calendar days in advance of need.

It is also understood by the CONTRACTOR that the CITY and the ENGINEER shall reject materials and products not in accordance with this Specifications and this Checklist.

Shop drawings shall be required for all structures and similar items not contained on this checklist, such as manholes, wet wells, and other castings.

Four (4) sets of the CONTRACTOR's and the ENGINEER's executed APPROVED MATERIALS CHECKLIST and any necessary shop drawings shall be submitted to the CITY and the ENGINEER for its use and approval, plus the number of sets needed for the CONTRACTOR's use.

Ordering material and products without specific written approval from the CITY of the submitted list and shop drawings is NOT recommended and is done at the CONTRACTOR's sole expense and responsibility.

NOTE: The latest changes approved by the CITY are indicated by "underlining" and deleted items by "~~strikethroughs~~".

American Iron and Steel, Buy American Act, or any procurement requirements identified in the contract documents shall take precedence over the materials listed in this checklist.

CONTENTS**Section 1: Electrical Equipment****Section 2: Field Instruments****Section 3: Analyzers****Section 4: Control Systems****Section 5: Networking****Section 6: Electrical Distribution**

APPENDIX A-4

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SECTION 1: ELECTRICAL EQUIPMENT

Electric Valve Actuators:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Beck		

Low Voltage Soft Starters:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Allen Bradley	SMC-Flex	

Variable Frequency Drives:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Yaskawa	IQ P1000	

Pump Motors:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Nidec		
Marathon Electric		
USA		
Franklin		

Automatic Transfer Switch:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Schneider Electric	ASCO Series 7000	

Emergency Backup Generators:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Caterpillar		

SECTION 2: FIELD INSTRUMENTS

Magnetic Flow Meter:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Yokogawa	ADMAG TI Series	

APPENDIX A-4

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APPROVED MATERIAL LISTPressure Transmitter:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Yokogawa	DPharp EJA Series	

Pressure Gauge:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Ashcroft	Model 1279 or 1009	Oil filled, Inc. Diaphragm Seal

Level Transmitter:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Vega	Vegapuls C21	

Float Switch:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Kari		

SECTION 3: ANALYZERS

Chlorine Residual:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Hach	CL17	

SECTION 4: CONTROL SYSTEMS

Program logic Controller:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Allen Bradley	CompactLogix	

Operator Interface Terminal:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Pro-Face Allen Bradley	GP4100 Series Panel View	

APPENDIX A-4

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<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Eaton		
APC		

Programmable Automation Controller:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Schweitzer Engineering Laboratories	SEL-2411	

Protective Relays:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Schweitzer Engineering Laboratories	SEL-787 Series	

Motor Management Relays:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Schweitzer Engineering Laboratories	SEL-849 Series	

Annunciator:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Schweitzer Engineering Laboratories	SEL-2533 Series	

Surge Protection:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Citel		
Phoenix Contact		

SCADA Software:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Trihedral	VT-SCADA	

SECTION 5: NETWORKING

Ethernet Switch:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Antaira		End Point Switch

APPENDIX A-4

ELECTRICAL, INSTRUMENTATION, AND CONTROLS
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<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Cisco		Network Backbone
Axis		Security Network

Fiber Optic Cable:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Corning		Bend Insensitive Cable

SECTION 6: ELECTRICAL DISTRIBUTION

Enclosures:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Hoffman		NEMA 4 White Powder Coat
Rittal		NEMA 4 White Powder Coat
Saginaw		NEMA 4 White Powder Coat

Junction / Pull Boxes:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Hoffman Enclosures		
Appleton Electric (Emerson)		
Arrow-Hart (Crouse-Hinds)		
Bell Electric (Square D)		
Keystone Columbia Inc.		
OZ/Gendy Co.		
Spring City Electrical MFG Co.		

Medium Voltage Switchgear:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Square D		

Metal Enclosed Load Interrupter Switchgear:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Square D	HVL/CC	

APPENDIX A-4

ELECTRICAL, INSTRUMENTATION, AND CONTROLS
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<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Cutler-Hammer		
General Electric Co.		
Square D		
Siemens		

Exterior Lighting Fixtures:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Cooper		
RAB		
Hubbell Inc.		
Lithona		

Transformers:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Square D		
Cooper/Bussman (Eaton)		

Surge Suppression:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Leviton		
Advanced Protection Technology		
Edco Company		
Joslyn Mfg. Supply Co.		
ASCO		

Circuit and Motor Disconnections:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Square D		
Cutler-Hammer		
General Electric Co.		
Siemens		

Generator Connection:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Hubbell		

APPENDIX A-4

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<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Appleton Electric (Emerson)		
Arrow-Hart (Crouse-Hinds)		
Bell Electric (Square D)		
Eagle Electric MFG Co.		
OZ/Gendy Co.		
Pass & Seymour		
RAVO Div; Harvey Hubbell, Inc.		
Thomas Betts Co.		

Receptacles:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Leviton	5362-1 Type Duplex	

GFI's:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Leviton	No. 6898-1	

Snap Switches:

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Leviton		