

NR-COGEN-CM
Construction Management Services for North River
Cogeneration and Electrification
AECOM
125 Broad St., 16th Floor
New York, NY 10004
T 212.377.8693

August 10, 2018

Via email to: Timothy P. Burns, P.E. NYS AIS Coordinator CWSRFinfo@efc.ny.gov

NYS Environmental Facilities Corporation

Subject: AIS Availability Waiver Request (10" and 12" Globe Valves)

New York City Department of Environmental Protection

North River WWTP, WP-164

Contract NR-38, Cogeneration and Electrification

Registration No. 20171426056 SRF Project No. C2-5234-28-00

Attachments:

- Letter from Yonkers Contracting Company, Inc. dated May 1, 2018
- Detailed Specifications 15111G
- Contract Drawings G00-6029, G00-6030, M22-1001 and M22-100
- RFI 15
- Correspondence from vendors re: valve AIS compliance
- Excerpts from Project Schedule update #5

Dear Mr. Burns:

Under contract with New York City Department of Environmental Protection (NYCDEP), AECOM provides construction management services for the NYCDEP for the Cogeneration and Electrification program at the North River Wastewater Treatment Plant. I am the Resident Engineer overseeing the performance of work under Construction Contract NR-38.

Under this Contract NR-38 with NYC DEP, Yonkers Contracting Company, Inc. (YCC) is required to furnish and install One (1) -10" Manual Globe Valve and One (1) -12" Manual Globe Valve for water service of the cogeneration engine exhaust heat recovery and cooling heat rejection systems in accordance with the Contract detailed specification 15111G "Valves – 4 inches and Larger" and as shown in the Contract Drawings G00-6029, G00-6030, M22-1001 and M22-1004.

The Contract includes the New York State Environmental Facilities Corporation contract packet with the American Iron and Steel (AIS) Requirement for this CWSRF project, which include valves. The AIS requirements section also allows for the submission of a waiver request if:

"Iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality;"

The following information is provided to the EFC in requesting AIS Waiver for the following item:



NR-COGEN-CM Construction Management Services for North River Cogeneration and Electrification AECOM 125 Broad St., 16th Floor New York, NY 10004 T 212.377.8693

- One (1) -10" Manual Globe Valve
- One (1) -12" Manual Globe Valve

The Project Team evaluated the six vendors for the globes valves listed in the contract specifications as well as three additional vendors (per the attached RFI 15) and determined these valves are currently only manufactured by Valvitalia, Mascot, Powell Valves or William Valve Corporation. These vendors have indicated they can not provide AIS compliant valves that meet the design requirements (see attached contractor/vendor correspondence). For reference, also attached are the valve specifications and drawings supplemented by the related RFI 15. The approximate cost of these valves is \$22,000.

Per the Project Schedule (update #5), the delivery of these valves is to occur on July 20, 2018 with the estimated fabrication time of approximately 16 weeks. The available float cannot fully offset the current delay to the schedule. As such, it is important to issue these valves for fabrication as soon as possible, so as not to delay the schedule further.

We request the waiver be considered and granted.

Please review and advise if you have any questions or comments, or submit this request to EPA for request of the waiver.

Sincerely,

Peter Marzziotti, P.E. Resident Engineer

te Maynes

AECOM

C: James Lauria, P.E., BEDC Frank Giardina, BEDC Domenick Loschiavo, P.E., Black & Veatch Timothy Loewen, BEDC



Building Quality for Over 70 Years

969 Midland Avenue Yonkers, NY 10704 Tel 914.965.1500 Fax 914.378.8885

> May 15, 2018 No. NR-38-AECOM-009

Peter Marzziotti, P.E. AECOM Power and Industrial 125 Broad St. New York, NY 10004

Re:

New York City Department of Environmental Protection (NYC DEP) WP-164, North River WWTP Cogeneration and Electrification Contract NR-38

Manual Globe Valves - AlS Waiver Request

Dear Mr. Peter Marzziotti,

Due to the specific project requirements, Yonkers Contracting Company, Inc. (YCC) the General Contractor for the NYC DEP Contract NR-38 - North River Wastewater Treatment Plant Cogeneration and Electrification is formally requesting an AIS Waiver for the following item:

- (1) 10" Manual Globe Valve
- (1) 12" Manual Globe Valve

Detailed Specification Section 15111G "Valves – 4 Inch and Larger" Paragraph 2.01, Z lists the following acceptable manufacturers:

- 1. American R/D
- 2. Mueller Water Co.
- 3. Amot
- 4. Valvitalia
- 5. Nor'East
- 6. Dezurik

Only one of the listed manufacturers (Valvitalia) can provide the specified valves, and they are not AIS compliant. Yonkers inquired whether an alternate valve would be considered, but due to the project specific requirements the designer has indicated that the specified globe valves must be used.

In addition to the Manufacturers indicated, Yonkers has investigated Mascot, Powell and Williams Valve as suggested by the designer in RFI-015, and none can provide 10" & 12" AIS compliant globe valves as per the specification.

The estimated cost of these valves is approximately [redacted].



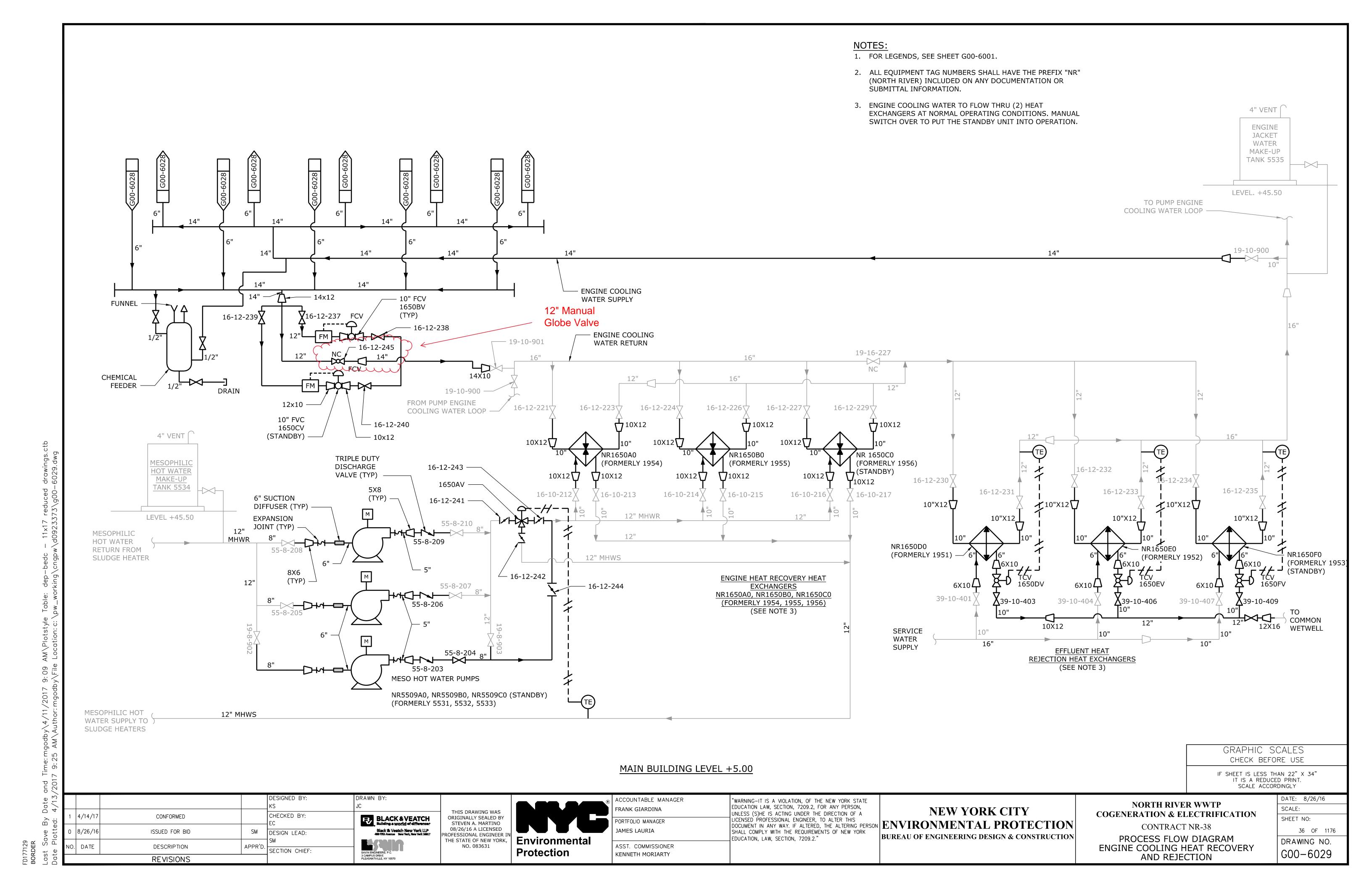
The current schedule shows delivery of these valves to occur July 17, 2018. The valves have been approved by the designer since February 16, 2018. The estimated fabrication for the valves is approximately 16 weeks. This activity is currently being delayed. Please expedite review of this waiver request.

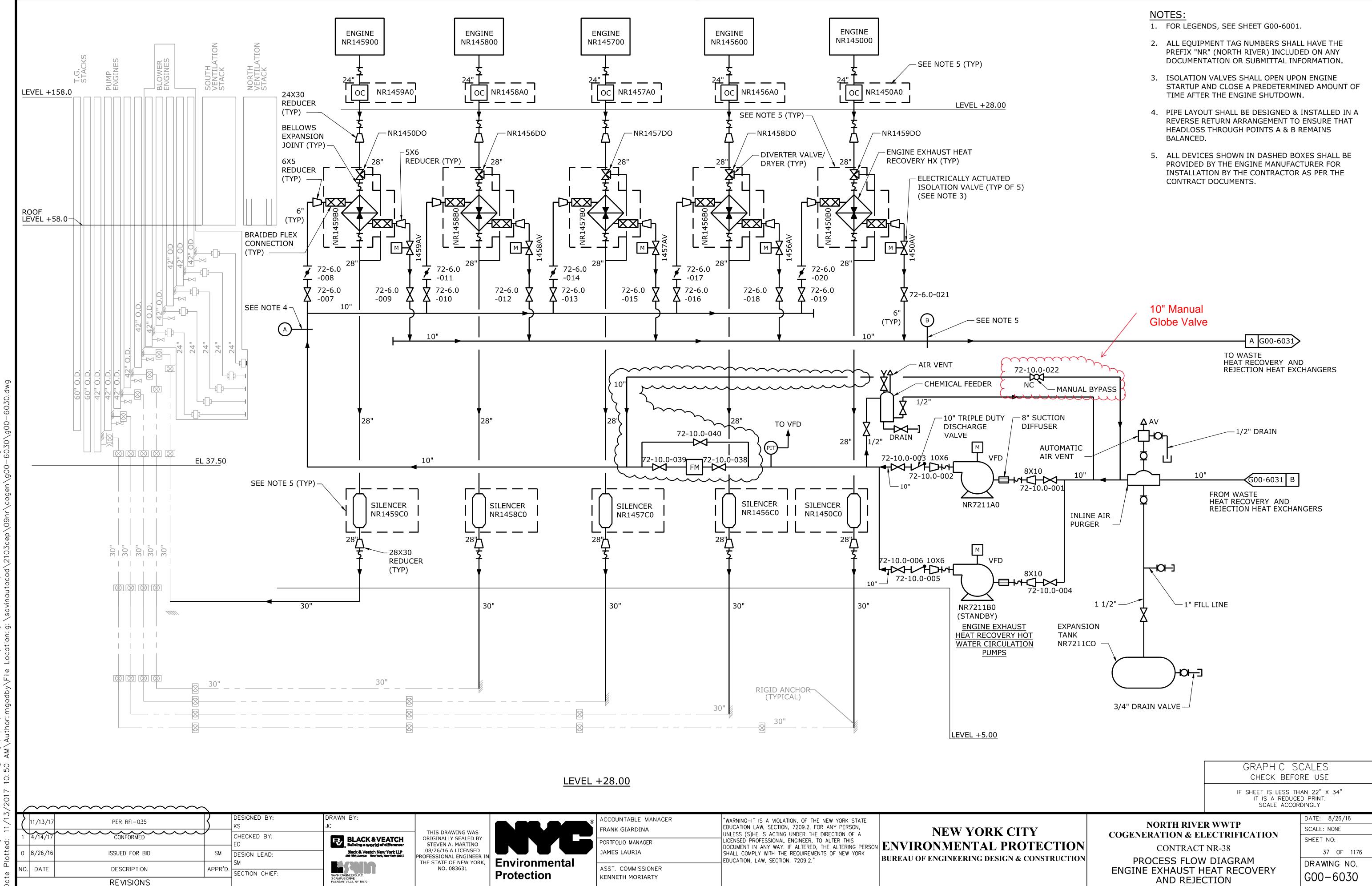
Should you have any questions, please contact me at (646) 374-0133 Ext. 201 or at jmerolla@yonkerscontractingco.com.

Sincerely,

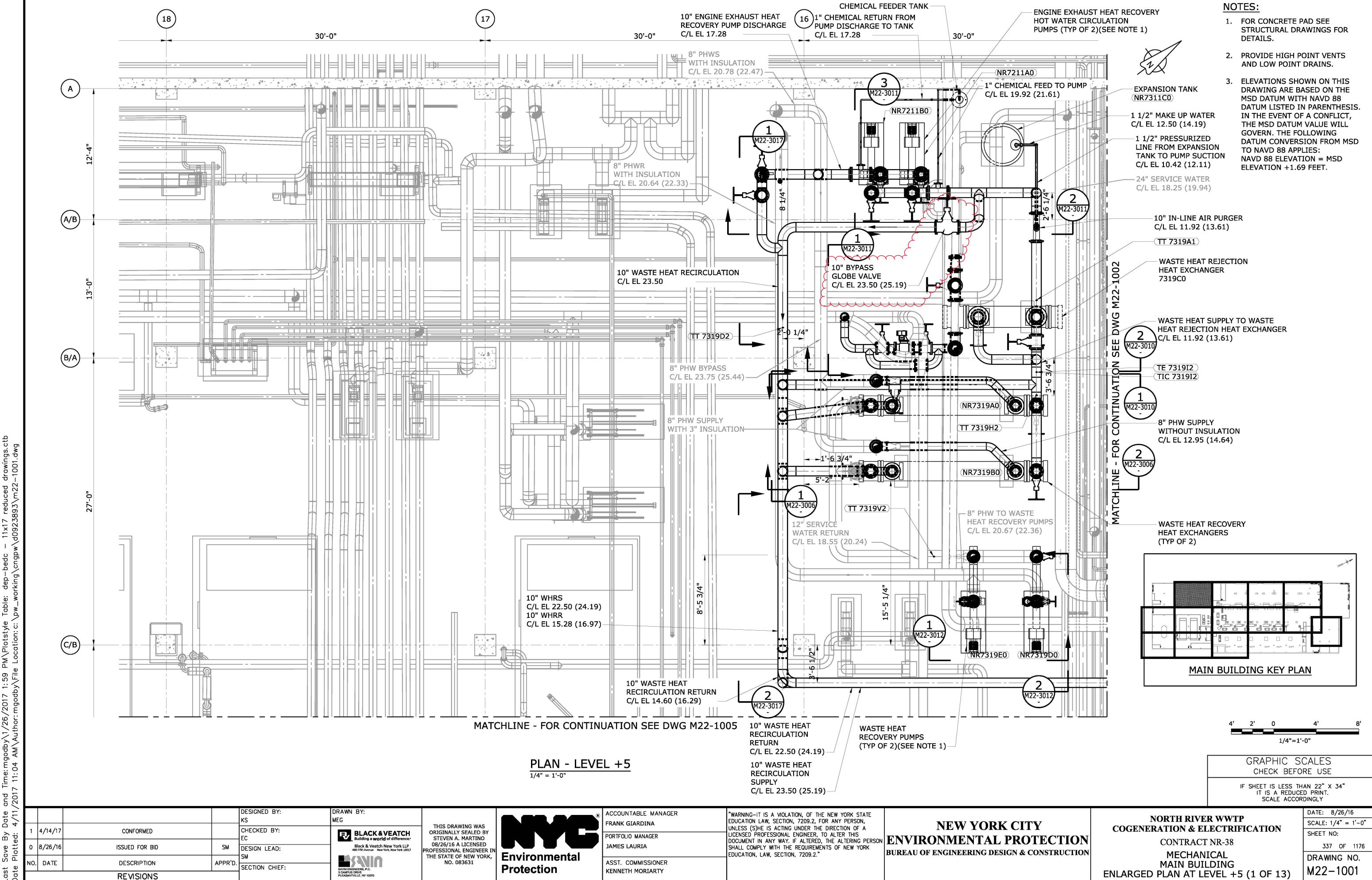
Yonkers Contracting Company, Inc.

John Merolla, P.E. Project Executive

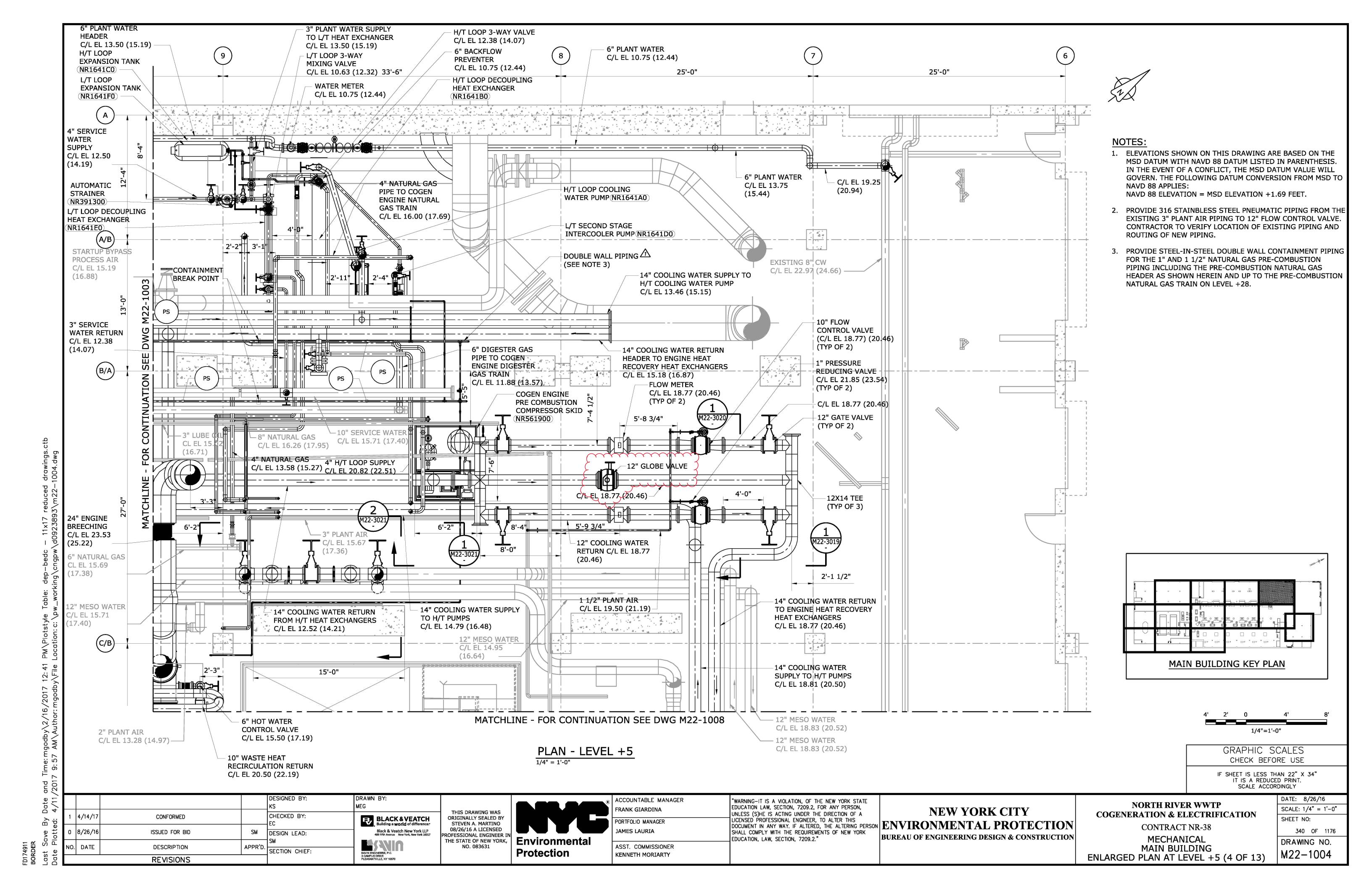




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DETAILED SPECIFICATION 15111G – VALVES – 4 INCH AND LARGER CONTRACT NR-38

| | | 3. | Aurora |
|---|-----|--------|---|
| | V. | V-Not | ch Ball Valves: |
| | | 1. | Fisher |
| | | 2. | Emerson |
| | | 3. | Mascot |
| | W. | Gas S | afety Shutoff valves |
| | | 1. | Maxon Corporation |
| | | 2. | Honeywell |
| | X. | Two-V | Way Temperature Control Globe Valves – Modulating Application |
| | | 1. | Valvitalia |
| | | 2. | Amot |
| | | 3. | Dezurik |
| | | 4. | Nor'East |
| | Y. | Three- | -way Temperature Control Valve |
| | | 1. | Amot |
| | | 2. | Valvitalia |
| | | 3. | Nor'East |
| | ~~~ | 4~ | Dezurik |
| 7 | Z. | Globe | Valves |
| 7 | | 1. | American R/D |
| > | | 2. | Mueller Water Co. |
| ح | | 3. | Amot |
| > | | 4. | Valvitalia |
| 7 | | 5. | Nor'East |
| 7 | | 6. | Dezurik |
| | | Backf | low Preventers! |
| | | 1. | Watts Regulator Company. |
| | | 2. | Wilkins. |
| | BB. | Motor | -Operators (Open/Close and Modulating): |

Limitorque.

Rotork.

2.

DETAILED SPECIFICATION 15111G – VALVES – 4 INCH AND LARGER CONTRACT NR-38

- 3. Actuators shall be quarter turn electric with a linear output providing modulating thrust.
- 4. Special features:
 - a. Rugged, compact and light weight
 - b. Powerful thrust at high response speed
 - c. Low friction
 - d. No special tools required to change the bench range or to reverse the actuator action
 - e. Permissible operating temperatures from -31 to 300 degree F.
 - f. Operated by hand in case of an emergency or power outage.
 - g. Provides network system connectivity, position controls and display.
 - h. Actuator speed. 1.5 mm/sec
- 5. Direction of action: Actuator motor drives a gearbox connected to the rotor shaft and turns the valve rotor clockwise or counter-clockwise, a maximum of 90 degrees. At the end of the travel, limit switches isolate the electrical supply to the motor when the valve rotor has reached either end of rotation.
- 6. Globe valve shall be provided with an electrical modulating actuator, Amot G Series, Rotork model IQML10 or approved equal. The actuator shall be designed for minimum 1200 starts per hour and 50% duty cycled based on a modulating torque of 50% of rated torque.
- 7. Provide actuator, PID controller and temperature sensor as part of the valve package. Provide additional accessories and parts for approved equal products at no additional costs to the authority.
- 8. Actuator operating power supply shall be 460V/3ph with 4-20A control signal.
- 9. Actuator shall be provided with a controller located in close proximity as per manufacturer recommendations.
- 10. Control wiring and power supply connections from and to the actuator and PID controller shall be provided.
- 11. Travel: Up to 160 mm (6.3in)
- D. Three-way temperature control valves shall be Valvitalia TRV model 3 or equal from Amot GEF Series, Dezurik, Nor'East or approved equal
- 2.30 GLOBE VALVES
 - A. General:

DETAILED SPECIFICATION 15111G – VALVES – 4 INCH AND LARGER CONTRACT NR-38

- 1. The valves shall conform to, ANSI standards and as specified herein.
- 2. Sizes: 4 in.-12
- 3. Type: Globe valve with end flanges conform to ANSI B16.5
- 4. Design Pressure: 100 psig Internal Temperature Rating: 250 °F.
- 5. Maximum Allowable Inlet Pressure: 300 psig
- 6. Minimum Design Flow Rate: 700 gpm
- 7. Maximum Design Flow Rate: 3200 gpm
- 8. Globe valves shall have an unrestricted straight-through flow.
- 9. Valve shall be operable with hand wheel or chain wheel.
- 10. Hand wheel shall have an arrow and the word "Open" or "Close" indicating required rotation. Hand wheel shall operate in the clockwise direction to close.
- B. Materials of Construction: All materials of construction shall conform to the requirements of AWWA C508 and shall be as follows for various valve components:
 - 1. Body and Seal Protector Ring: Cast Steel
 - 2. Bonnet: Cast Steel
 - 3. Seat and Plug: Cast Steel or Stainless Steel
 - 4. Seal Ring: PTFE with glass fiber
 - 5. Guide Bushing: Cast Steel or Stainless Steel
 - 6. Packing: V-ring packing PTFE with carbon, Spring-high temp. packing
 - 7. Heating Jackets: A240 316L
 - 8. Seal Retainer Screws and Washers: Stainless Steel
 - 9. Actuator Mounting Bolts and Nuts: Grade 5 steel or strain hardened B8M stainless steel
 - 10. I.D. Tags and Pins: Stainless Steel
- C. Testing:
 - 1. All valves shall be shop tested in conformance with the requirement of AWWA C507.
- D. Permitted Leakage at Design Working and Operating Pressures: Zero
- 2.31 BACKFLOW PREVENTERS
 - A. Reduced Pressure Zone (RPZ) backflow preventers shall consist of isolation valves, two independent check valves, and differential relief valve.



Request for Information (RFI) - 15

| Project: | NR-38 - North River WWTP Cogeneration and Electrification | Project Number: | |
|----------------------------|---|------------------------|--|
| Process Document: | RFI - 15 | Overall Due Date: | |
| Current Workflow Step: | Finish | Step Due Date: | |
| Subject: | Globe Valves | | |
| Status: | Approved | | |
| Initiated on | | Droject | |
| Initiated on Behalf Of: | | Project Commitment: | |

Date Requested

By:

10.10.2017

| RFI Details | |
|-------------------------------|---|
| Critical?: | Yes |
| Problem/Description/Question: | Refer to Specification Section 15111G - Valves 4" and larger. This section lists the following valves with the following manufacturers: |
| | 2.01.X. Two-Way Temperature Control Globe Valves - Modulating Application: 1. Valvitalia |
| | 2. Amot |
| | 3. Dezurik |
| | 4. Nor'East |
| | 2.01.Y. Three-Way Temperature Control Valves: |
| | 1. Amot |
| | 2. Valvitalia |
| | 3. Nor'East |
| (,,,, | 4. Dezurik |
| > | 2.01.Z. Globe Valves: |
| > | 1. American R/D |
| > | 2. Mueller Water Co. |
| <u> </u> | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
| (| |



After reaching out to the headquarters and/or local representatives of each of the manufacturers listed above we received the following responses:

- Valvitalia
- o No local representative
- o Valves are fabricated in Italy and shipped directly
- o Not AIS compliant
- Amot
- o Local representative is Thermal Products Inc.
- o They mentioned they cannot meet all the
- requirements. Some of the reasons are:
- Battery backup for the actuator
- 425F operating temperatures
- Carbon steel in the large sizes
- Class IV leakage
- AWWA
- Dezurik
- o Local representative is Tek-Sales
- o Stopped fabricating these valves a long time ago
- o The company was Nor'East and was sold
- Nor'East (Allagash)
- o Local representative is Raritan Valve & Automation
- o They do not make the specified valves. They are not able to quote.
- American R/D
- o Spoke directly with fabricator
- o They stopped fabricating these valves in the 70s
- Mueller Water Co.
- o Spoke directly with fabricator
- o The do not offer Globe Valves

Provide manufacturers that comply with project requirements.

Spec Section & Paragraph:

15111G (2.01.X, 2.01.Y, 2.01.Z)

Drawing Reference:

N/A

Code Reference/Other

Reference:

Suggested Solution:

Provide manufacturers that comply with project requirements.

Potential Cost Impact:

No

Potential Schedule Impact:

No

Originated From

Non-Conformance Report:

RFI Response

Response:

The following clarification is provided in reference to Detailed Specification 15111G.

Articles 2.01 X. and 2.28 - Delete the word "Globe" from the heading. Article 2.28 A. 1. a - The temperature range should be: 14 to 212 degrees Fahrenheit.

Article 2.28 A. 3. - Delete and replace the word "globe" with "control" Article 2.28 C. 5. - Delete the word first word "Globe" and replace with "Control."

Article 2.29 A. 1. a - The temperature range should be: 14 to 212 degrees Fahrenheit.

Article 2.29 A. 3. - Please delete the word "globe."

Article 2.29 C. 6. - Delete the word first word "Globe" and replace with "Control."

Article 3.04 Valve Schedule - For Valves 1650DV, 1650EV and 1650FV, Revise the Type to "Two-Way Control"

Manufacturers that can provide two way control valves, three way control valves, and globe valves that meet the contract requirements are as follows:

Article 2.01 X. - Two way Control Valve - Modulating Application

1. Mascot

2. DeZurik - DeZurik Model RCV-Rotary Control Valve with Carbon steel body meets the specification requirement, They even comply with ANSI/FCI 70-2 - Control Valve Seat Leakage Classification - Class IV - metal to metal with a metal seat. Most of the material of construction for this valve are rated for high temperature.

Article 2.01 Y. - Three-Way Temperature Control Valve

- 1. Mascot
- 2. Amot Amot GEF and GPD Series fabricated of stainless steel or Ductile iron for sizes up to 16" is available and can meet the design specification with

temperature up to 212 deg F. They can meet the leakage classification for stainless steel and nitrile (rubber) and or Ductile iron with Viton.

Article 2.01 Z. - Globe Valve

- 1. Mascot
- 2. Powell Valves
- 3. William Valve Corporation

The following bullets provide further clarification:

- 1. No Battery backup is specified in Specification 15111G.
- 2. Temperature range is as revised above.
- 3. Carbon steel flanges are available in accordance with ANSI B16.5.
- 4. Class IV leakage classification Both two way and three way control valves with the type of seat material can meet the class IV leakage classification in accordance with ANSI/FCI 70-2.
- 5. AWWA-Testing shall be in accordance with API 598.

Comments

Khalil Rouchdy, Yonkers Contracting, 10.03.2017 8:54 AM

A document was attached

Files Attached: RFI-015 Final.pdf

Attached Documents

| / total incu = oca incines | | | |
|----------------------------|---|---------------|-----------|
| File Name | Attached By | Date Attached | Step |
| RFI-015 Final.pdf | Rouchdy, Khalil (Yonkers Contracting) | 10.03.2017 | RE Review |



CONSTRUCTION MANAGEMENT SERVICES REQUEST FOR INFORMATION



| | | NEGUL | SIION | NECKINATION | | Design and Construction |
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| Project: | | | | | | |
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| Contract No: | | | CM: | | | |
| Contractor: | | | EOR: | | | |
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| Initiated by: | | | | Signature | Date | |
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CM Approval:

Date:

Reference: SOP 217 Request For Information

No Cost Impact to Contract
Credit is due back to the City
Payment is Due to the Contractor

To Be Determined Answered by:

Date:

Form Rev: 0 Date: 3/7/13 RFI 015 – Globe Valves Additional Comment Sheet.

Refer to Specification Section 15111G - Valves 4" and larger. This section lists the following valves with the following manufacturers:

2.01.X. Two-Way Temperature Control Globe Valves – Modulating Application:

- 1. Valvitalia
- 2. Amot
- 3. Dezurik
- 4. Nor'East

2.01.Y. Three-Way Temperature Control Valves:

- 1. Amot
- 2. Valvitalia
- 3. Nor'East
- 4. Dezurik

2.01.Z. Globe Valves:

- 1. American R/D
- 2. Mueller Water Co.
- 3. Amot
- 4. Valvitalia
- 5. Nor'East
- 6. Dezurik

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Amot

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- o They mentioned they cannot meet all the requirements. Some of the reasons are:
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 - 425F operating temperatures
 - Carbon steel in the large sizes
 - Class IV leakage
 - AWWA

Dezurik

- o Local representative is Tek-Sales
- o Stopped fabricating these valves a long time ago
- o The company was Nor'East and was sold

RFI 015 – Globe Valves Additional Comment Sheet.

- Nor'East (Allagash)
 - o Local representative is Raritan Valve & Automation
 - o They do not make the specified valves. They are not able to quote.
- American R/D
 - o Spoke directly with fabricator
 - o They stopped fabricating these valves in the 70s
- Mueller Water Co.
 - o Spoke directly with fabricator
 - o The do not offer Globe Valves

Provide manufacturers that comply with project requirements.

Good morning sir,

As discussed on the phone our valves do not conform to the American Iron and Steel requirements (AiS).

More so, if you can bypass that requirement you will need to go through a distributor to purchase these valves. Here is a list of distributors in New York:

Albany - F W WEBB COMPANY (518-472-9322) Binghamton - F W WEBB COMPANY (518-472-9322) Horseheads - WOLSELEY INDUSTRIAL (607-739-3013) Newburgh - F W WEBB COMPANY (845-567-0242) Niagara Falls - LAKES PIPE & SUPPLY (800-654-0465) Queensbury - F W WEBB COMPANY (518-792-1316) Rochester - WOLSELEY INDUSTRIAL (585-458-2930) Syracuse - F W WEBB COMPANY (315-476-9322)

Let me know if you have any questions!

All quotations and orders are processed according to Powell's Terms & Conditions. Any deviations must be communicated to buyer in writing by management of The WM. Powell Company. Link to <u>The WM.</u> Powell Company Terms & Conditions

Joshua Mannix Customer Service Representative The Wm. Powell Company T: 513.852.2269

F: 513.852.2997 powellvalves.com





This message has been filtered by Cohere Communication's Email Security System to scan for

virus threats and reduce unwanted SPAM.

Carl,

In researching manufacturers of cast steel valves, gate, globe and checks, I have been unable to find one that

actually casts them in in the US.

Ray

--

Regards,



Email: ray.virgens@tek-sales.com

Cell: (201) 563-6594 Phone: (585) 426-4580















"The Bitterness of Low Quality Remains Long after the Sweetness of Low Price is Forgotten"

This message has been filtered by Cohere Communication's Email Security System to scan for virus threats and reduce unwanted SPAM.

On Mon, May 14, 2018 at 10:53 AM, Carl Pica < cpica@yonkerscontractingco.com > wrote:

Ray,

Just left you a message. Give me a call back when you get a chance.

Thanks,

Carl Pica

Project Engineer



Yonkers Contracting Company

North River WWTP

T 646.374.0133

C 914.261.0223

cpica@yonkerscontractingco.com

Yonkers Contracting Celebrates 70th Anniversary with New Website Launch-

www.yonkerscontractingco.com

Response from Williams Valve

Carl,

Our Globe valves are not AIS compliant. Valves are made overseas.

Best Regards,

Glen Werthmuller

From: Carl Pica <cpica@yonkerscontractingco.com>

Sent: Monday, May 7, 2018 8:35:06 AM

To: wew

Subject: RE: North River WWTP Globe Valves

Just following up, please confirm receipt of this email.

Carl Pica

Project Engineer



Yonkers Contracting Company

North River WWTP T 646.374.0133 C 914.261.0223 cpica@yonkerscontractingco.com

www.yonkerscontractingco.com

Yonkers Contracting Celebrates 70th Anniversary with New Website Launch-

From: Carl Pica

Sent: Thursday, May 3, 2018 1:21 PM

To: 'wew@williamsvalve.com' <wew@williamsvalve.com>

Subject: North River WWTP Globe Valves

Good Morning,

We are looking for AIS compliant Globe Valves 10 and 12". If these are not made AIS compliant then we need a statement to that effect in writing via email, so we can request a project waiver. If you need additional information please let me know.

Thanks,

Carl Pica

Project Engineer



Yonkers Contracting Company

North River WWTP T 646.374.0133 C 914.261.0223 cpica@yonkerscontractingco.com

| Yonkers Contracting Celebrates 70th | Anniversary | with New | Website | Launch- |
|-------------------------------------|--------------------|----------|---------|---------|
| www.vonkerscontractingco.com | | | | |

This message has been filtered by Cohere Communication's Email Security System to scan for virus threats and reduce unwanted SPAM.



To Yonkers contracting,

This is regarding the valves quoted by us as per your order no 17-0257-29.

Unfortunately, Mascot USA would not be able to comply with the AIS requirements in their entirety for these valves.

| P NR-38 NR WWTP Cogeneration and Electrification UD05 DD6.1.18 | | NR: | 38 Att 1-All | Activities Preliminar | <u>'Y</u> | | <u>.</u> | | | 15-Jun- |
|--|---|--------------------|-----------------------|--------------------------------------|------------------------|------------------------|---------------------------------|------------------------|------------------|--|
| Activity Name | Original Duration | Actual Duration | Remaining Duration | Activity % Start Complete | Finish | Finish Date Prev UD | Gain/Loss to F Prev Update F | Finish Date BL | Total Float / | 2018 2019 2020 2021 |
| rication- Manually Oper Metal Std Butterfly Valves 4"" or Lrgr | 107.00 | 72.00 | 55.00 | 19-Feb-18 A | 17-Aug-18 | 15-Aug-18 | -2.00 | 25-May-18 | 38.00 | 3 Q4 Q1 Q2 Q3 |
| 38-9960 Fabricate-Mnlly Oper Metal Std Butterfly Valves 4 " or Larger Submittal Package | 100.00 | 72.00 | 50.00 | 50% 19-Feb-18 A | 10-Aug-18 | 08-Aug-18 | | 18-May-18 | 38.00 | Fabricate-Mnlly Oper Metal Std |
| 8-14060 Deliver-Mnlly Oper Metal Std Butterfly Valves 4"" or Larger Submittal Package MHW Pipe | 5.00 | 0.00 | 5.00 | 0% 13-Aug-18 | 17-Aug-18 | 15-Aug-18 | | 25-May-18 | 38.00 | Deliver-Mally Oper Metal Std B |
| 5111- Manually Oper Butterfly Valves 4"" or Lrgr | 253.00 | | 35.00 | 14-Aug-17 A | _ | 18-Jul-18 | | 28-Aug-18 | 151.00 | |
| nittals- Manually Oper Butterfly Valves 4"" or Lrgr | 153.00 | 127.00 | 0.00 | 14-Aug-17 A | 16-Feb-18 A | 16-Feb-18 | 0.00 | 02-Mar-18 | . T | †††† † 16-Feb-18 A, Şubmittals- Manua |
| P&S- Manually Oper Butterfly Valves 4"" or Larger Submittal Package(R0) | 100.00 | 110.00 | 0.00 | 100% 14-Aug-17 A | 24-Jan-18 A | 24-Jan-18 | 0.00 | 08-Jan-18 | | P&S- Manually Oper Butterfly V |
| 8-7040 R&A- Manually Oper Butterfly Valves 4"" or Larger Submittal Package(R0) | 12.00 | 17.00 | 0.00 | 100% 24-Jan-18 A | 16-Feb-18 A | 16-Feb-18 | 0.00 2 | 25-Jan-18 | | R&A- Manually Oper Butterfly V.; |
| 8-8030 P&S- Manually Oper Butterfly Valves 4"" or Larger Submittal Package(R1) | 15.00 | 0.00 | 0.00 | 100% 16-Feb-18 A | 16-Feb-18 A | 16-Feb-18 | 0.00 | 15-Feb-18 | | P&S- Manually Oper Butterfly V.: |
| 8-9470 R&A- Manually Oper Butterfly Valves 4"" or Larger Submittal Package(R1) | 10.00 | 0.00 | 0.00 | 100% 16-Feb-18 A | 16-Feb-18 A | 16-Feb-18 | 0.00 | 02-Mar-18 | | R&A- Manually Oper Butterfly V |
| cation- Manually Oper Butterfly Valves 4"" or Lrgr | 100.00 | 72.00 | 35.00 | 19-Feb-18 A | 20-Jul-18 | 18-Jul-18 | | 28-Aug-18 | 151.00 | · ▼ · · · · · · · · · · · · · · · · · · |
| 8-14490 Fabricate- Manually Oper Butterfly Valves 4"" or Larger MHW Pipe | 100.00 | 72.00 | 30.00 | 70% 19-Feb-18 A | 13-Jul-18 | 11-Jul-18 | | 21-Aug-18 | 95.00 | Fabricaté- Manually Oper Butte |
| 8-10630 Fabricate- Manually Oper Butterfly Valves 4"" or Larger Waste HW Pipe | 100.00 | 72.00 | 30.00 | 70% 19-Feb-18 A | 13-Jul-18 | 11-Jul-18 | | 25-May-18 | 151.00 | Fabricate- Manually Oper Butte |
| 8-19430 Deliver- Manually Oper Butterfly Valves 4"" or Larger MHW Pipe | 5.00 | 0.00 | 5.00 | 0% 16-Jul-18 | 20-Jul-18 | 18-Jul-18 | | 28-Aug-18 | 95.00 | Deliver- Manually Oper Butterf |
| 8-14600 Deliver- Manually Oper Butterfly Valves 4"" or Larger Waste HW Pipe | 5.00 | 0.00 | 5.00 | 0% 16-Jul-18 | 20-Jul-18 | 18-Jul-18 | | 04-Jun-18 | 151.00 | Deliver- Manually Oper Butterf |
| 5111- Pneumatic V-Ball Valves 4"" or Lrgr | 283.00 | | 70.00 | 14-Aug-17 A | 10-Sep-18 | 29-Aug-18 | | 04-Jun-18 | -3.00 V | 10-Sep-18; Item 15111; Pneumat |
| nittals- Pneumatic V-Ball Valves 4"" or Lrgr | 153.00 | 167.00 | 0.00 | 14-Aug-17 A | 16-Apr-18 A | 16-Apr-18 | | 02-Mar-18 | Y. | <u>4.4.5.5</u> 4.5.5 4.4.4.4.4.5 4.5.4.4.4.4.4.4.4.4.4 |
| 8-4250 P&S- Pneumatic V-Ball Valves 4"" or Larger Submittal Package(R0) | 100.00 | 74.00 | 0.00 | 100% 14-Aug-17 A | | 30-Nov-17 | | 08-Jan-18 | | P&S- Pneumatic V-Ball Valves 4 |
| 8-7050 R&A- Pneumatic V-Ball Valves 4 [™] or Larger Submittal Package(R0) | 12.00 | 53.00 | 0.00 | 100% 30-Nov-17 A | 16-Feb-18 A | | | 25-Jan-18 | | R&A Prieumatic V-Ball Valves 4 |
| 8-8040 P&S- Pneumatic V-Ball Valves 4"" or Larger Submittal Package(R1) 8-9480 R&A- Pneumatic V-Ball Valves 4"" or Larger Submittal Package(R1) | 15.00 | 6.00 33.00 | 0.00 | 100% 19-Feb-18 A 100% 28-Feb-18 A | 28-Feb-18 A | | | 15-Feb-18 02-Mar-18 | | P&S- Pheumatic V-Ball Valves 4 |
| 8-9480 R&A- Pneumatic V-Ball Valves 4"" or Larger Submittal Package(R1) cation-Pneumatic V-Ball Valves 4"" or Lrgr | 10.00 | 33.00 | 70.00 | 100% 28-Feb-18 A | 16-Apr-18 A | 16-Apr-18 29-Aug-18 | | 02-Mar-18 04-Jun-18 | -3.00 | R&A- Pneumatic V-Ball Valves 4 |
| 8-10570 Fabricate- Pneumatic V-Ball Valves 4"" or Larger Cooling Water | 100.00 | 33.00 | 65.00 | 16-Apr-18 A 50% 16-Apr-18 A | 10-Sep-18 31-Aug-18 | 29-Aug-18 22-Aug-18 | | 04-Jun-18 25-May-18 | -3.00 | Fabricate- Pneumatic V-Ball Va |
| 8-14500 Deliver- Pneumatic V-Ball Valves 4" or Larger Cooling Water | 5.00 | 0.00 | 5.00 | 0% 04-Sep-18 | 10-Sep-18 | 29-Aug-18 | | 04-Jun-18 | -3.00 | Fabricate-Prieumatic V-Bati Va; |
| 5111- Electric V-Ball Valves 4" or Lrgr | 278.00 | | 70.00 | 14-Aug-17 A | • | 13-Sep-18 | | 25-May-18 | 116.00 | |
| nittals- Electric V-Ball Valves 4"" or Lrgr | 148.00 | 167.00 | 0.00 | 14-Aug-17 A | 16-Apr-18 A | 16-Apr-18 | | 23-Way-18 | 110.00 | 16-Apr-18 A. Submittals - Elect |
| 8-4260 P&S- Electric V-Ball Valves 4"" or Larger Submittal Package(R0) | 100.00 | 74.00 | 0.00 | 100% 14-Aug-17 A | <u> </u> | 30-Nov-17 | | 08-Jan-18 | | P&S- Electric V-Balli Valives 4" |
| 8-7060 R&A- Electric V-Ball Valves 4"" or Larger Submittal Package(R0) | 12.00 | 53.00 | 0.00 | 100% 30-Nov-17 A | 16-Feb-18 A | | | 25-Jan-18 | | R&A- Electric V-Ball Valves 4" |
| 8-8050 P&S- Electric V-Ball Valves 4"" or Larger Submittal Package(R1) | 10.00 | 0.00 | 0.00 | 100% 16-Feb-18 A | 16-Feb-18 A | | | 08-Feb-18 | | P&S Electric V-Ball Valvies 4" |
| 8-9030 R&A- Electric V-Ball Valves 4"" or Larger Submittal Package(R1) | 10.00 | 0.00 | 0.00 | 100% 16-Apr-18 A | 16-Apr-18 A | | | 23-Feb-18 | | R&A- Electric V-Ball Valves 4" |
| ication- Electric V-Ball Valves 4"" or Lrgr | 130.00 | 73.00 | 70.00 | 16-Feb-18 A | 10-Sep-18 | 13-Sep-18 | 3.00 | 25-May-18 | 116.00 | V 10-Sep-18, Fabrication- Electr |
| 8-10040 Fabricate- Electric V-Ball Valves 4"" or Larger Waste Heat HW | 100.00 | 73.00 | 65.00 | 50% 16-Feb-18 A | 31-Aug-18 | 06-Sep-18 | 3.00 | 18-May-18 | 116.00 | Fabricate- Electric V-Ball Val |
| 8-10230 Fabricate- Electric V-Ball Valves 4"" or Larger Cooling Water | 100.00 | 73.00 | 65.00 | 50% 16-Feb-18 A | 31-Aug-18 | 06-Sep-18 | 3.00 | 18-May-18 | -3.00 | Fabricate- Electric V-Ball Val |
| 8-14100 Deliver- Electric V-Ball Valves 4"" or Larger Waste Heat HW | 5.00 | 0.00 | 5.00 | 0% 04-Sep-18 | 10-Sep-18 | 13-Sep-18 | 3.00 2 | 25-May-18 | 116.00 | Deliver- Electric V-Ball Valve |
| 8-14220 Deliver- Electric V-Ball Valves 4"" or Larger Cooling Water | 5.00 | 0.00 | 5.00 | 0% 04-Sep-18 | 10-Sep 18 | 13-Sep-18 | 3.00 2 | 25-May-18 | -3.00 | Deliver- Electric V-Ball Valve |
| 5111- Manual Globe Valves 4"" or Lrgr | 238.00 | 200.00 | 35.00 | 14-Aug-17 A | 20-Jul-18 | 18-Jul-18 | -2.00 | 07-Aug-18 | 32.00 | 20-Jul-18, Item 15111- Manual |
| nittals- Manual Globe Valves 4"" or Lrgr | 148.00 | 127.00 | 0.00 | 14-Aug-17 A | 16-Feb-18 A | 16-Feb-18 | 0.00 | 09-Mar-18 | T | 16-Feb-18'A', Submittals- Manua |
| P&S- Manual Globe Valves 4"" or Larger Submittal Package(R0) | 110.00 | 74.00 | 0.00 | 100% 14-Aug-17 A | 30-Nov-17 A | 30-Nov-17 | 0.00 2 | 23-Jan-18 | | P&S- Manual Globe, Valves 4" p.,. |
| R&A- Manual Globe Valves 4"" or Larger Submittal Package(R0) | 12.00 | 53.00 | 0.00 | 100% 30-Nov-17 A | 16-Feb-18 A | 16-Feb-18 | 0.00 | 08-Feb-18 | | R&A Manual Globe Valves 4"" o |
| 8-9040 P&S- Manual Globe Valves 4"" or Larger Submittal Package(R1) | 10.00 | 0.00 | 0.00 | 100% 16-Feb-18 A | | | | 23-Feb-18 | | P&S- Manual Globle Valves 4"" d |
| 8-10050 R&A- Manual Globe Valves 4"" or Larger Submittal Package(R1) | 10.00 | 0.00 | 0.00 | 100% 16-Feb-18 A | 16-Feb-18 A | 16-Feb-18 | | 09-Mar-18 | | R&A- Manual Globe Valves 4"" o |
| cation- Manual Globe Valves 4"" or Lrgr | 90.00 | | 35.00 | 16-Feb-18 A | 20-Jul-18 | 18-Jul-18 | | 07-Aug-18 | 32.00 | 20-Jul-18, Fabrication- Manual |
| 8-11080 Fabricate- Manual Globe Valves 4"" or Larger Cooling Water | 90.00 | | 30.00 | 67% 16-Feb-18 A | 13-Jul-18 | 11-Jul-18 | | 31-Jul-18 | 32.00 | Fabricate-Manual Globe Valves |
| 8-18360 Deliver- Manual Globe Valves 4"" or Larger Cooling Water | 5.00 | 0.00 | 5.00 | 0% 16-Jul-18 | 20-Jul-18 | 18-Jul-18 | | 07-Aug-18 | 32.00 | Deliver- Manual Globe Valves √03-Aug+18, Ittern 15111-(Elctrc |
| 5111- (Elctrc & Pnmtc)Two Way Control Valves 4"" or Lrgr | 283.00 | | 45.00 | 14-Aug-17 A | | 29-Aug-18 | | 11-Jun-18 | 118.00 | |
| nittals- (Elctrc & Pnmtc)Two Way Control Valves 4"" or Lrgr | 148.00 | | 0.00 | 14-Aug-17 A | 16-Apr-18 A | <u> </u> | _ | 09-Mar-18 | | ▼ 16-Apr-18 A. Submittals- (Elct |
| 8-4280 P&S-Two Way Control Valves 4"" or Lrgr Submittal Package(R0) | 110.00 | 74.00 | 0.00 | 100% 14-Aug-17 A | | 30-Nov-17 | | 23-Jan-18 | | P&S-Two Way Control Valves 4"" |
| 8-7700 R&A- Two Way Control Valves 4"" or Lrgr Submittal Package(R0) | 12.00 | 53.00 | 0.00 | 100% 30-Nov-17 A | 16-Feb-18 A | _ | | 08-Feb-18 | | R&A- Two Way Control Valves 4" |
| 8-9050 P&S- Two Way Control Valves 4"" or Lrgr Submittal Package(R1) | 10.00 | 6.00 | 0.00 | 100% 19-Feb-18 A | 28-Feb-18 A | _ | | 23-Feb-18 | [| P&S- Two Way Control Valves 4" |
| 8-10060 R&A- Two Way Control Valves 4"" or Lrgr Submittal Package(R1) | 10.00 | 33.00 | 0.00 45.00 | 100% 28-Feb-18 A | 16-Apr-18 A | | | 09-Mar-18 | 118.00 | R&A: Two Way Control Valves: 4" |
| cation- (Elctrc & Pnmtc)Two Way Control Valves 4"" or Lrgr 3-11090 Fabricate- Control Valves 4"" or Lrgr | 100.00 | 33.00 33.00 | 40.00 | 16-Apr-18 A 40% 16-Apr-18 A | 03-Aug-18 27-Jul-18 | 29-Aug-18 22-Aug-18 | | 11-Jun-18 04-Jun-18 | 118.00 118.00 | |
| 8-14880 Deliver- Two Way Control Valves 4" or Lrgr | 5.00 | 0.00 | 5.00 | 0% 30-Jul-18 | 03-Aug-18 | 29-Aug-18 | | 11-Jun-18 | 118.00 | Fabricate- Control Valves 4"" |
| 5111- Manual Triple Duty Valves 4" or Lrgr | 283.00 | | 45.00 | 14-Aug-17 A | | 01-Aug-18 | | 18-Jun-18 | 91.00 | Deliver-: Two;Way Control Valv ▼ 03-Aug-18, Item 15111-: Manual |
| ittals- Manual Triple Duty Valves 4" or Lrgr | 172.00 | | 0.00 | 14-Aug-17 A | 16-Apr-18 A | 16-Apr-18 | | 16-34H-18 | V- | 16+Apr-18 A, Submittals- Mahua |
| 8-4290 P&S- Manual Triple Duty Valves 4" or Larger Submittal Package(R0) | 110.00 | 109.00 | 0.00 | 100% 14-Aug-17 A | 22-Jan-18 A | | | 23-Jan-18 | | P&S- Manual Triple Duty Valves, |
| 3-7710 R&A- Manual Triple Duty Valves 4" or Larger Submittal Package(R0) | 12.00 | 22.00 | 0.00 | 100% 14 Aug 17 A | 23-Feb-18 A | | | 08-Feb-18 | | |
| 8-9060 P&S- Manual Triple Duty Valves 4" or Larger Submittal Package(R1) | 15.00 | 12.00 | 0.00 | 100% 26-Feb-18 A | 14-Mar-18 A | _ | | 02-Mar-18 | | P&S- Manual Triple Duty Valves |
| 8-10580 R&A- Manual Triple Duty Valves 4" or Larger Submittal Package(R1) | 10.00 | 23.00 | 0.00 | 100% 14-Mar-18 A | 16-Apr-18 A | | | 16-Mar-18 | | R&A- Manual Triple Duty Valves |
| cation- Manual Triple Duty Valves 4"" or Lrgr | 100.00 | 33.00 | 45.00 | 16-Apr-18 A | 03-Aug-18 | 01-Aug-18 | | 18-Jun-18 | 91.00 | 103-Aug+18, Fabrication+ Manual |
| 8-11580 Fabricate- Manual Triple Duty Valves 4"" or Larger MHW Pipe | 100.00 | 33.00 | 40.00 | 60% 16-Apr-18 A | 27-Jul-18 | 25-Jul-18 | | 11-Jun-18 | 46.00 | Fabricate-Manual Triple Duty |
| 8-11620 Fabricate- Manual Triple Duty Valves 4"" or Larger Primary & Waste HW | 100.00 | 33.00 | 40.00 | 60% 16-Apr-18 A | 27-Jul-18 | 25-Jul-18 | | 11-Jun-18 | 91.00 | Fabridate- Manual Triple Duty |
| 8-15360 Deliver- Manual Triple Duty Valves 4 ^{mt} or Larger MHW Pipe | 5.00 | 0.00 | 5.00 | 0% 30-Jul-18 | 03-Aug-18 | 01-Aug-18 | | 18-Jun-18 | 46.00 | Deliver: Manual Triple Duty:Va |
| | | | | <u> </u> | | | | | | |
| · · · | Milestone Prev UpdateMilestone | е | | Page 31 o | f 98 | - | TASK filter: All A | Activities | | © Oracle Col |