

DUROTECH
BUILDERS OF INTEGRITY
11931 Wickchester Lane #205
Houston, TX 77043-6892
Phone: 281.558.6892

Change Request

Owner : Huntsville Independent School District
441 FM 2821 East
Huntsville, TX 77320

Project: 22- 723- / Huntsville Stadium Renovations & Athletics
515 FM Rd. 2821 E
Huntsville, TX 77320

Submitted Date: 06/13/24

PCOType: PCO

Change Request # : 61 **REV 2 CPR 37REV - PCO 61: ADD PRVS & REPAIR PRESSURE LEAKS**

FIRE LINE PRV DELETED PER DIG.

PRVS MAY TAKE 4 TO 5 WEEKS TO OBTAIN AFTER RELEASE UPON APPROVAL. (VERIFYING ANY TIME CHANGE FOR DELIVERY WITH WATTS.

DEANCO WILL NOT REQUIRE CAD DRAWINGS FROM PBK FOR FIRE MARSHAL SUBMITTAL SINCE FIRE LINE PRV WAS DELETED BY DIG.

PERMIT REVISIONS FOR PRVS RESPONSIBILITY OF PBK IF REQUIRED BY CITY OF HUNTSVILLE.

TEMPORARY WATER LINE WILL BE RUN FROM FB FH PARKING LOT FIRE HYDRANT VIA A SURFACE LINE TO FEED ADMINISTRATION BUILDING. MINIMAL SHUT DOWN TIME FOR THE ADMINISTRATION BUILDING.

WILL COORDINATE WITH BB/SB FOR WATER SHUT DOWN.

FIRE LINE CROSSING HORNET WAY HAS PRV ADD DELETED PER DIG.

BB/SB HAS PRV ADDED FOR IRRIGATION.

Item : 1 REV 2 CPR 37 - PCO 61: ADD PRVS & REPAIR PRESSURE LEAKS

Phase	Description	Cost Type	Estimated Cost
033000- - -PCO61	CPR37PCO61: CONCRETE PAVING POUR BACK	4 S	9,050.00
328000- - -PCO61	CPR37PCO61:SOD & IRRIGATION REPAIR ALLOW	4 S	9,000.00
328000- - 1-PCO61	CPR37PCO61: IRRIGATION PRV BB/SB	4 S	5,506.00
330000- - -PCO61	CPR37 PCO61: PRV ADD & PIPING	4 S	144,400.66
330000- - 1-PCO61	CPR37 PCO 61: WATER LEAK REPAIR	4 S	8,970.43
787416- - -PCO61	CPR37PCO61:SITE MAINT & CLEAN UP	7 CL	3,500.00
014225- - -PCO61	CPR37PCO61:PRV BR INSURANCE	9 O	585.87
014230- - -PCO61	CPR37PCO61:PRV GL/UMB INS	9 O	1,241.25
014240- - -PCO61	CPR37PCO61:PRV BONDS	9 O	1,461.70
GENERAL CONDITIONS			13,973.00
FEE			5.00% 9,185.80
Requested Total For Item			1 206,874.71
Added Days for Item: 21			
Total For Change Request			206,874.71
Total Added Calendar Days: 21			

NOTE: IF AMOUNTS ARE NOT TAKEN FROM CONTINGENCY ALLOWANCE, OR THE ALLOWANCE IS EXCEEDED, THEN THE FINAL QUOTE AMOUNT MUST BE ADJUSTED FOR THE APPROPRIATE MARK UP, INSURANCE, BONDS AND OTHER APPLICABLE COSTS.

THE COMPENSATION REQUESTED BY THIS PROPOSAL, DOES NOT INCLUDE ANY AMOUNTS FOR CHANGES IN THE SEQUENCE OF WORK, EXTENDED OVERHEAD, DELAYS, DISTRIBUTIONS AND/OR IMPACT COSTS, AND THE RIGHT IS EXPRESSLY RESERVED TO MAKE CLAIMS FOR ANY AN ALL OF THESE RELATED ITEMS OF COST PRIOR TO ANY FINAL SETTLEMENT OF THIS CONTRACT.

THIS SHEET IS TO BE INCLUDED IN ITS ENTIRETY AS PART OF A CHANGE ORDER OR CONTINGENCY AUTHORIZATION. NO PART OF THIS SHEET MAY BE EXCLUDED FROM INCLUSION AS PART OF A CHANE ORDER OR CONTINGENCY AUTHORIZATION WITHOUT THE EXPRESS WRITTEN CONSENT OF DUROTECH, INC.

Submitted By: Durotech, Inc.

Reviewed By: PBK Architects

Approved By: Huntsville Independent School Dist

Signed:

Signed:

Signed:

Date:

Date:

Date:

CHANGE ORDER BASIS

REV 2 RFP 37 - PCO 61: PRESSURE REDUCING VALVES & LEAK REPAIR HUNTSVILLE STADIUM RENOVATIONS & IMPROVEMENTS - CHANGE ORDER BASIS BASED UPON WATTS PRVS AND LESS FIRE LINE PRV PER DIG PLUS BB/SB IRRIGATION PRV									
DESCRIPTION	QTY	UNIT	LABOR UNIT	LABOR TOTAL	MATL UNIT	MATL TOTAL	TOTAL COSTS	GROUP TOTAL	
PRV ADDED VALVES & PIPING	1	LS	-	-		144,400.66	144,400.66		
WATER LEAK REPAIR	1	LS	-	-		8,970.43	8,970.43		
CONCRETE PAVING POUR BAC	1	LS	-	-	-	9,050.00	9,050.00		
LANDSCAPE SOD IRRIG ALLOV	1	LS	-	-	-	9,000.00	9,000.00		
SITE MAINT & CLEAN UP	1	LS	-	-	-	3,500.00	3,500.00		
IRRIGATION PRV BB/SB	1	LS	-	-	-	5,506.00	5,506.00		
	1	LS	-	-	-	-	-		
	1	LS	-	-	-	-	-		
	1	LS	-	-	-	-	-		
	1	LS	-	-	-	-	-		
	1	LS	-	-	-	-	-		
	1	LS	-	-	-	-	-		
	1	LS	-	-	-	-	-		
SUB QUOTE	1	LS	-	-	-	-	-		
SUBTOTAL				\$ -		\$ 180,427.09	\$ 180,427.09	\$	180,427.09
GL/UMB INSURANCE							\$ 1,241.25		
BR INSURANCE							\$ 585.87		
P & P BOND							\$ 1,461.70		
SUB-TOTAL							\$ 183,715.91		
GENERAL CONDITIONS							\$ 13,973.00		
CHANGE ORDER FEE					5.00%		\$ 9,185.80		
							\$ -		
TOTAL							\$ 206,874.71	\$	206,874.71
					\$ -	FINAL QUOTE		\$	206,874.71

CPR 37 - PCO 61 (REVISED)
GENERAL CONDITIONS ITEMS RELATED TO PRV AND LEAK REPAIRS
HUNTSVILLE STADIUM - SUMMER WORK - CHANGE ORDER BASIS

DESCRIPTION	QTY	UNIT	LABOR UNIT	LABOR TOTAL	MATL UNIT	MATL TOTAL	TOTAL COSTS	GROUP TOTAL
	1	LS	-	-	-	-	-	
SUPERINTENDENT	3	WKS	-	-	3,320.00	9,960.00	9,960.00	
PROJECT MANAGER	0.5	WKS	-	-	3,040.00	1,520.00	1,520.00	
TRUCK/FUEL ALLOWANCE	3	WKS	-	-	173.00	519.00	519.00	
TRUCK ALLOWANCE	3	WKS	-	-	173.00	519.00	519.00	
CELL PHONE	3	WKS	-	-	35.00	105.00	105.00	
TEMP TOILET	1	EACH	-	-	500.00	500.00	500.00	
DUMPSTERS	1	EACH	-	-	700.00	700.00	700.00	
ICE & CUPS	1	EACH	-	-	150.00	150.00	150.00	
	1	LS	-	-		-	-	
SUB QUOTE	1	LS	-	-		-	-	
SUBTOTAL				\$ -		\$ 13,973.00	\$ 13,973.00	\$ 13,973.00
							\$ -	
							\$ -	
							\$ -	
SUB-TOTAL							\$ 13,973.00	
							\$ -	
							\$ -	
TOTAL							\$ 13,973.00	\$ 13,973.00
					\$ -	GENERAL CONDITIONS		\$ 13,973.00

Deanco, Inc.

est. 1978

Physical: 40314 Community Rd. Magnolia, TX 77354

Mailing: PO Box 299 Pinehurst, TX 77362-0299

June 10, 2024

Huntsville High School Athletic Complex

Attention: Tim Garrison

Subject: CPR 37

The following is the associated cost to install the pressure reducing valves shown in CPR 37.

Total: \$144,400.66

***Pricing excludes concrete pour back* Please assume 280 SF Sidewalk Pour Back and 200 SF of Parking Space Pour Back.**

We have removed the 8" PRV and all work associated per Durotech's Direction

Pricing assumes work will happen in the summer and we will be able to shut off the waterline. The Admin building will require a full week shut down in order to install. The Baseball and Tennis Court Valves will take approximately 3 days each shut down.

If you have any questions concerning this matter please feel free to contact me at 281-851-4610.

Sincerely,

Greg Funderburk
Project Manager
Cell: (281)-851-4610

Subcontractor Pricing

Sub-Contractor: Deanco, Inc.

Date: 6/10/2024

Project: HUNTSVILLE HIGH SCHOOL ATHLETIC COMPLEX

2219

Description: CPR 37

MATERIAL	QUANTITY	UNIT	UNIT PRICE	TOTAL
1.5" SDR 21	86	LF	\$ 1.33	\$ 114.38
1.5" 45 BEND	2	EA	\$ 1.00	\$ 2.00
3" SDR 21	80	LF	\$ 3.05	\$ 244.00
3" 90 BEND	4	EA	\$ 12.00	\$ 48.00
3" TEE	1	EA	\$ 15.00	\$ 15.00
4" C900 DR 18	72	LF	\$ 7.69	\$ 553.68
4" TEE	2	EA	\$ 135.13	\$ 270.26
4" 45 BEND	2	EA	\$ 92.36	\$ 184.72
4" 90 BEND	2	EA	\$ 135.13	\$ 270.26
4" GV W BOX	4	EA	\$ 789.00	\$ 3,156.00
4" Megalugs	22	EA	\$ 46.69	\$ 1,027.18
3" PRV	1	EA	\$ 34,052.00	\$ 34,052.00
4" PRV	1	EA	\$ 37,282.00	\$ 37,282.00
MISC. OFFSET FITTINGS/MATERIALS	1	LS	\$ 3,500.00	\$ 3,500.00
57 STONE DRAINAGE ROCK	25	TON	\$ 42.00	\$ 1,050.00
Haul Off	6	Loads	\$ 100.00	\$ 600.00
Bank Sand	6	Loads	\$ 200.00	\$ 1,200.00
			SUBTOTAL	\$ 83,569.48
			MARKUP 10.00%	\$ 8,356.95
			TOTAL	\$ 91,926.43

SUBCONTRACTOR	QUANTITY	UNIT	UNIT PRICE	TOTAL
CITY PLUMBING PERMIT	1	LS	\$ 1,050.00	\$ 1,050.00
FULL DEPTH SAWCUT	80	LF	\$ 10.00	\$ 800.00
DUMPSTER	1	EA	\$ 750.00	\$ 750.00
CONCRETE CORE	2	EA	\$ 650.00	\$ 1,300.00
EQUIPMENT MOBILIZATION	1	LS	\$ 3,000.00	\$ 3,000.00
			SUBTOTAL	\$ 6,900.00
			MARKUP 5.00%	\$ 345.00
			TOTAL	\$ 7,245.00

LABOR	QUANTITY	UNIT	RATE	TOTAL
Foreman	78	HOURS	\$ 40.00	\$ 3,120.00
Operator	78	HOURS	\$ 28.08	\$ 2,190.24
Operator	78	HOURS	\$ 26.84	\$ 2,093.52
Operator	78	HOURS	\$ 26.84	\$ 2,093.52
Laborer	78	HOURS	\$ 23.88	\$ 1,862.64
Laborer	78	HOURS	\$ 23.88	\$ 1,862.64
Laborer	78	HOURS	\$ 23.88	\$ 1,862.64
Laborer	78	HOURS	\$ 23.88	\$ 1,862.64
Surveyor	0	HOURS	\$ 40.00	\$ -
			SUBTOTAL	\$ 16,947.84
			LABOR BURDEN 45.00%	\$ 7,626.53
			LABOR MARKUP 10.00%	\$ 1,694.78
			TOTAL	\$ 26,269.15

EQUIPMENT	QUANTITY	UNIT	RATE	TOTAL
Foreman/Surveyor Truck	78	Hrs	\$ 33.32	\$ 2,598.96
Excavator	52	Hrs	\$ 189.87	\$ 9,873.24
L90 LOADER	52	Hrs	\$ 91.62	\$ 4,764.24
			SUBTOTAL	\$ 17,236.44
			MARKUP 10.00%	\$ 1,723.64
			TOTAL	\$ 18,960.08

TOTALS	
MATERIAL	\$ 91,926.43
SUBCONTRACTOR	\$ 7,245.00
LABOR	\$ 26,269.15
EQUIPMENT	\$ 18,960.08
GRAND TOTAL	\$ 144,400.66

NOTES:



DATE: 06-10-2024
PROJECT: HUNTSVILLE ISD ATHLETIC COMPLEX PRV STATIONS
CONTRACTOR: DEANCO CIVIL
ATTN: GREG FUNDERBURK
QUOTE #: 042324-01 R06-10-2024

TERMS NET 30 DAYS
Provisions: This quotation is valid for 30 days
This quote may be subject to the owner and engineers approval
Vault assemblies are delivered and set provided that our crane truck has clear
and unobstructed access to the customers graded excavation.
EXCLUDES SALES TAX

Deanco, Inc.

est. 1978

Physical: 40314 Community Rd. Magnolia, TX 77354

Mailing: PO Box 299 Pinchurst, TX 77362-0299

May 14, 2024

Huntsville High School Athletic Complex

Attention: Tim Garrison

Subject: Water Leak Repair

The following is the associated cost to repair the two 3" water line leaks.

Total: \$8,970.43

If you have any questions concerning this matter please feel free to contact me at 281-851-4610.

Sincerely,

Greg Funderburk
Project Manager
Cell: (281)-851-4610

Subcontractor Pricing

Sub-Contractor: Deanco, Inc.

Date: 10/18/2023

Project: HUNTSVILLE HIGH SCHOOL ATHLETIC COMPLEX

2219

Description: Water Leak Repair

MATERIAL	QUANTITY	UNIT	UNIT PRICE	TOTAL
Misc. Materials	1	LS	\$ 1,000.00	\$ 1,000.00
		EA		\$ -
		EA		\$ -
		TON		\$ -
		SUBTOTAL		\$ 1,000.00
		MARKUP	10.00%	\$ 100.00
		TOTAL		\$ 1,100.00

SUBCONTRACTOR	QUANTITY	UNIT	UNIT PRICE	TOTAL
Mobilization	1	LS	\$ 1,200.00	\$ 1,200.00
Dumpster	1	LS	\$ 750.00	\$ 750.00
		SF		\$ -
		SUBTOTAL		\$ 1,950.00
		MARKUP	5.00%	\$ 97.50
		TOTAL		\$ 2,047.50

LABOR	QUANTITY	UNIT	RATE	TOTAL
Foreman	10	HOURS	\$ 40.00	\$ 400.00
Operator	10	HOURS	\$ 28.08	\$ 280.80
Operator	10	HOURS	\$ 26.84	\$ 268.40
Operator	10	HOURS	\$ 26.84	\$ 268.40
Laborer	10	HOURS	\$ 23.88	\$ 238.80
Laborer	10	HOURS	\$ 23.88	\$ 238.80
Laborer	10	HOURS	\$ 23.88	\$ 238.80
Laborer	10	HOURS	\$ 23.88	\$ 238.80
Surveyor	0	HOURS	\$ 40.00	\$ -
		SUBTOTAL		\$ 2,172.80
		LABOR BURDEN	45.00%	\$ 977.76
		LABOR MARKUP	10.00%	\$ 217.28
		TOTAL		\$ 3,367.84

EQUIPMENT	QUANTITY	UNIT	RATE	TOTAL
Foreman/Surveyor Truck	10	Hrs	\$ 33.32	\$ 333.20
450 DOZER	0	Hrs	\$ 116.30	\$ -
Excavator	10	Hrs	\$ 189.87	\$ 1,898.70
L90 LOADER	0	Hrs	\$ 91.62	\$ -
54" Compactor	0	Hrs	\$ 79.77	\$ -
		SUBTOTAL		\$ 2,231.90
		MARKUP	10.00%	\$ 223.19
		TOTAL		\$ 2,455.09

TOTALS	
MATERIAL	\$ 1,100.00
SUBCONTRACTOR	\$ 2,047.50
LABOR	\$ 3,367.84
EQUIPMENT	\$ 2,455.09
GRAND TOTAL	\$ 8,970.43

NOTES:

Tim Garison

From: Billy Walton <billy@ads-tx.com>
Sent: Tuesday, May 21, 2024 11:12 PM
To: Tim Garison
Subject: Fw: Huntsville Concrete Work

Thanks,
Billy Walton Jr.
President
American Drilling & Sawing, Inc.
12217 Sowden Rd
Houston, Texas 77080
Office: 713-939-1132
Cell: 832-628-6411
Email: billy@ads-tx.com



Website: www.ads-tx.com
Facebook: <https://www.facebook.com/adstx>

From: Billy Walton
Sent: Tuesday, May 21, 2024 11:10 PM
To: TIMG@durotech.com <TIMG@durotech.com>
Subject: Huntsville Concrete Work

Paving Pour Back

- parking spot addition
- 25'L x 7'6"W x 7" thick
 - form/reinforce curb area
 - pour and finish

+ SIDEWALK
* 2550 =

Concrete Curb

- 121' ln. ft. of 6" x 6" curb
- form/reinforce new curb
 - pour and finish

Trench Pour Back

- 25'L x 2'W x 7"thick
- dowel/epoxy

-pour and finish

Total -----\$6,500.00

Thanks,
Billy Walton Jr.
President

American Drilling & Sawing, Inc.
12217 Sowden Rd
Houston, Texas 77080
Office: 713-939-1132
Cell: 832-628-6411
Email: billy@ads-tx.com

+ 2550 SIDEWALK

\$ 9050.00



Website: www.ads-tx.com

Facebook: <https://www.facebook.com/adstx>

Subcontractor Pricing

Sub-Contractor: Maldonado Nursery & Landscaping

Date : 6/17/2024

Project: Huntsville HS Football & Tennis Complex

No: #25

Description:

Install PESB Valve and PRS Dial to reduce pressure after Backflow.

MATERIAL	QUANTITY	UNIT	UNIT PRICE	TOTAL
Rainbird 300PESB	1	EA	\$ 495.00	\$ 495.00
PRS Dial	1	EA	\$ 85.000	\$ 85.00
Pipe & Sch.80 Fittings, Etc.	1	EA	\$ 100.000	\$ 100.00
Sod Repair	1	EA	\$ 875.000	\$ 875.00
SUBTOTAL				\$ 1,555.00
MARKUP 10.00%				\$ 155.50
TOTAL				\$ 1,710.50

LABOR	QUANTITY	UNIT	RATE	TOTAL
Foreman	12	HOURS	\$ 52.50	\$ 630.00
Laborer	40	HOURS	\$ 25.50	\$ 1,020.00
PM Labor	1	HOURS	\$ 100.00	\$ 100.00
HOURS				\$ -
SUBTOTAL				\$ 1,750.00
LABOR BURDEN 40.00%				\$ 700.00
LABOR MARKUP 10.00%				\$ 245.00
TOTAL				\$ 2,695.00

EQUIPMENT	QUANTITY	UNIT	RATE	TOTAL
Truck & Trailer	1	EA	\$ 250.00	\$ 250.00
Mini Ex	1	EA	\$ 500.00	\$ 500.00
Mobilization	1	EA	\$ 250.00	\$ 250.00
SUBTOTAL				\$ 1,000.00
MARKUP 10.00%				\$ 100.00
TOTAL				\$ 1,100.00

TOTALS	
MATERIAL	\$ 1,710.50
LABOR	\$ 2,695.00
EQUIPMENT	\$ 1,100.00
GRAND TOTAL	
	\$ 5,506

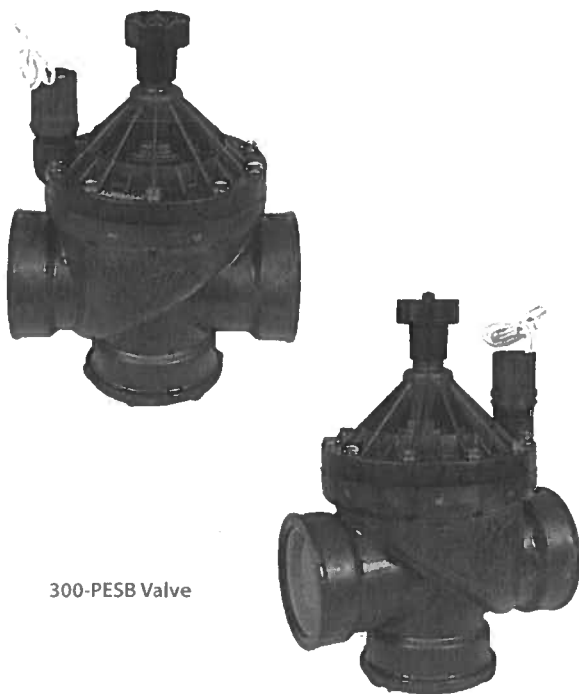
Excludes:

300-PESB Valve

PESB Performance and Value

TECHNICAL SPECIFICATIONS

MODEL:



300-PESB Valve

Rain Bird's 3" PESB valve is built tough to offer long life and efficient, trouble-free performance - even under harsh conditions. This valve is designed to withstand extreme pressure surges, effluent water and clogging debris. The PESB model is equipped with a patented scrubber mechanism to actively fight dirt and particles.

FEATURES:

- Globe and angle configuration for flexibility in design and installation
- Manual internal and external bleed
- External bleed does not allow debris to go through the solenoid ports when system is flushed. Internal bleed operates the valve without allowing water into the valve box; allows pressure regulator to be adjusted without turning the valve on at the controller first
- Slow closing to prevent water hammer and subsequent system damage
- Highly efficient operation with extremely low pressure loss
- Flow control handle adjusts water flows as needed
- Nylon scrubber scrapes its stainless steel screen clean to break down grit and plant material. Prevents debris build-up and clogging

OPERATING RANGE:

Pressure

20 to 200 psi (1.38 to 13.80 bar)

Flow with/without PRS-D

60 to 300 gpm (13.62 to 68.10 m³/h; 227 to 1136 l/m)

Temperature

up to 150°F (66°C)

OPTIONS (ORDER SEPARATELY):

- Accommodates optional, field-installed PRS-D pressure regulating module to ensure optimum sprinkler performance
- Optional purple flow control handle for non-potable water applications (BPE-NP-HAN)
- Accepts latching solenoid for use with Rain Bird battery-operated controllers up to 150 psi (10.35 bar)
- Compatible with ESP-LXD decoders/IVM

ELECTRICAL SPECIFICATIONS:

Power

24 VAC 50/60 Hz (cycle/sec) solenoid

Inrush current

0.41 A (9.84VA) at 60 Hz

Holding current

0.28 A (6.72VA) at 60 Hz

DIMENSIONS:

Size

300

Height

13 1/4" (34.61 cm)

Length

8" (20.32 cm)

Width

7" (17.78 cm)

MODEL:

300PESB 3"

BSP threads available, specify when ordering.

HOW TO SPECIFY:

300 - PESB - PRS-D

Size
300: 3"

Model
PESB:
scrubber
model

Optional Feature
PRS-Dial: pressure
regulating module
(must be ordered
separately)

Note:

Valve and PRS-Dial module must be ordered separately. For non-U.S. applications, it is necessary to specify NPT or BSP thread type.



SPECIFICATIONS:

The electric remote control valve shall be a normally closed 24 VAC 50/60 Hz (cycle/sec) solenoid actuated globe/angle pattern design. The valve pressure rating shall not be less than 200 psi (13.80 bar). The valve shall have the following characteristics (circle one):

Flow rate: _____ gpm m³/h l/m

Pressure loss not to exceed: _____ psi bar

The valve body and bonnet shall be heavy-duty glass-filled UV-resistant nylon and have stainless steel bolts. The diaphragm shall be of nylon reinforced nitrile rubber.

The valve shall have both internal and external manual open/close control (internal and external bleed) to manually open and close the valve without electrically energizing the solenoid. The valves internal bleed shall prevent flooding of the valve box.

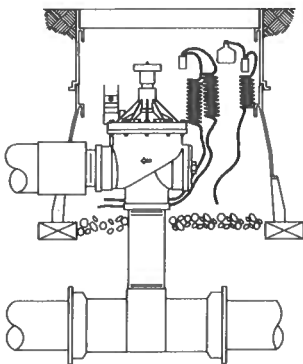
The solenoid shall require 24 VAC 50/60 Hz power and open with 19.6 VAC minimum at 200 psi (13.80 bar). At 24VAC, average inrush current shall not exceed 0.41 amps. Average holding current shall not exceed 0.28 amps.

The valve shall have a brass flow control stem for accurate manual regulation and/or shut-off of outlet flow. The valve must open or close in less than 1 minute at 200 psi (13.80 bar) and less than 30 seconds at 20 psi (1.38 bar).

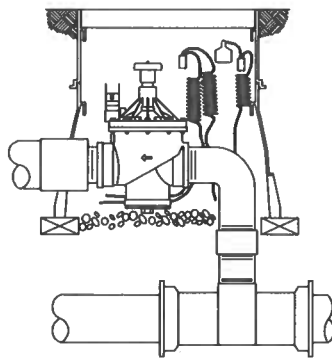
The PESB valve shall have a self-cleaning stainless steel screen designed for use in dirty water applications.

The valve construction shall be such as to provide for all internal parts to be removable from the top of the valve without disturbing the valve installation.

**Heavy Duty 3" Remote Control
Valve Angle Installation**



**Heavy Duty 3" Remote Control
Valve Globe Installation**



OPTIONAL FEATURE SPECIFICATION:

PRS-D Pressure Regulating Module, 300 PESB-PRS

When so indicated on the design, the 3" electric remote control valve shall have a pressure regulating module (PRS-D) capable of regulating outlet pressure between 15 and 100 psi (±3 psi) (1.04 and 6.90 bar (±0.21 bar)).

The PRS-D module shall have an adjusting knob for setting pressure and Schrader valve connection for monitoring pressure. The pressure shall be adjustable from the PRS-D when the valve is internally manually bled or electrically activated.

Non-Potable Flow Control Handle, BPE-NP-HAN

When so indicated on the design, the valve shall have a purple flow control handle to indicate to the user that non-potable water is being used. There shall be no difference between the black and purple handles except for the color.

PESB 3" Valve Pressure Loss (psi)

FLOW GPM	GLOBE	ANGLE
60	6.6	6.8
80	5.1	5.9
100	3.2	3.5
120	1.8	1.8
140	1.8	2.1
160	2	2.1
180	2.2	2
200	2.7	2.5
250	4	3.4
300	4.9	4.5

PESB 3" Valve Pressure Loss (bar)

FLOW m ³ /h	FLOW l/m	GLOBE	ANGLE
13.63	227.12	0.46	0.47
18.17	302.83	0.35	0.41
22.71	378.54	0.22	0.24
27.25	454.25	0.12	0.12
31.80	529.96	0.12	0.14
36.34	605.66	0.14	0.14
40.88	681.37	0.15	0.14
45.42	757.08	0.19	0.17
56.78	946.35	0.28	0.23
68.14	1135.62	0.34	0.31

Notes

1. Loss values are with flow control fully open
2. PRS-D module recommended for all flow rates.

Recommendations

1. Rain Bird recommends flow rates in the supply line not to exceed 7.5 ft./sec. (2.29 m/s) in order to reduce the effects of water hammer
2. For flows below 5 gpm (1.14 m³/h; 19.21 l/m), Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm.
3. For flows below 10 gpm (2.27 m³/h; 37.8 l/m) Rain Bird recommends the flow control stem be turned down two full turns from the fully open position.

Rain Bird Corporation

6991 East Southpoint Road
Tucson, AZ 85756

Ph: (520) 741-6100

F: (520) 741-6522

Rain Bird Technical Services

(800) RAINBIRD (1-800-724-6247)

U.S. & Canada

Rain Bird Corporation

970 West Sierra Madre Avenue
Azusa, CA 91702

Ph: (626) 812-3400

F: (626) 812-3411

Specifications Hotline

800-458-3005

U.S. & Canada

Rain Bird International, Inc.

1000 West Sierra Madre Avenue
Azusa, CA 91702

Ph: (626) 963-9311

F: (626) 852-7343

The Intelligent Use of Water™

www.rainbird.com

PRS-Dial

Pressure Regulating Module

The PRS-Dial is an excellent means of regulating outlet pressure at the valve regardless of incoming pressure fluctuations. The visible scale makes installation quick and easy. The regulator fits all Rain Bird PGA, PEB, PESB, PESB-R, EFB-CP, and BPES series valves.

Features

- Regulates and maintains constant outlet pressure between 15 and 100 psi (1.04 to 6.90 bar) within ± 5 psi (± 0.34 bar)
- Improved spike reduction capabilities reduce water hammer
- Ergonomic design with snap-tight cover to prevent vandalism
- Waterproof dial cartridge eliminates fogging and binding
- Schrader valve connects pressure hose gauge
- Easy field installation. PRS-Dial threads underneath the solenoid and adapter
- Corrosion-resistant glass-filled nylon for rugged performance

Operating Range

- Pressure: up to 100 psi (6.90 bar)*
- Regulation: 15 to 100 psi (1.04 to 6.90 bar)
- Accuracy: ± 5 psi (± 0.34 bar)
- Flow: refer to chart

Temperature: up to 150°F (66°C)

** While the PRS-Dial unit can withstand pressure up to 200 psi (13.80 bar), accurate pressure regulation can be maintained only up to 100 psi (6.90 bar).*

Application Information

- Proper operation requires inlet pressure to be a minimum of 15 psi (1.04 bar) higher than desired outlet pressure.
- For areas with very high pressure or uneven terrain, install sprinklers with PRS pressure regulating stems and/or SAM check valves.
- When inlet pressure exceeds 100 psi (6.90 bar), a pressure regulating master valve or inline pressure regulator is required.
- Rain Bird does not recommend using the pressure regulating module for applications outside the recommended flow ranges.



- To reduce the effects of water hammer, Rain Bird recommends flow rates in the supply line not to exceed 7.5 ft/sec (2.29 m/s).
- For flows below 10 gpm (2.27 m³/h; 37.8 l/m), Rain Bird recommends the flow control stem be turned down two full turns from the fully open position.
- For flows below 5 gpm (1.14 m³/h; 19.2 l/m), Rain Bird recommends the use of upstream filtration to prevent debris from collecting below the valve diaphragm.

Recommended Flow Ranges*

Model	gpm	m³/h	l/m
100-PGA	5-40	1.14-9.08	19.2-151
150-PGA	30-100	6.81-22.70	113-378
200-PGA	40-150	9.08-34.05	151-568
100-PEB	5-50	1.14-11.35	19.2-189
150-PEB	20-150	4.54-34.05	76-568
200-PEB	75-200	17.03-45.40	284-757
100-PESB/PESB-R	5-50	1.14-11.35	19.2-189
150-PESB/PESB-R	20-150	4.54-34.05	76-568
200-PESB/PESB-R	75-200	17.03-45.40	284-757
100-EFB-CP	5-50	1.14-11.35	19.2-189
150-EFB-CP	20-120	4.54-31.78	76-529
200-EFB-CP	20-200	4.54-45.40	76-757
300-BPES	60-300	13.62-68.10	227-1136

* These are the valve flow ranges.

Specifications

The pressure regulating module shall be a two-piece device consisting of a glass-filled, UV resistant nylon housing and dial cartridge.

When so indicated on the design, the plastic or brass valve shall have a pressure regulating module (PRS-Dial) which shall have the following characteristics (circle one):

Operating pressure: _____ psi bar

Outlet pressure regulation:
between _____ and _____ psi bar

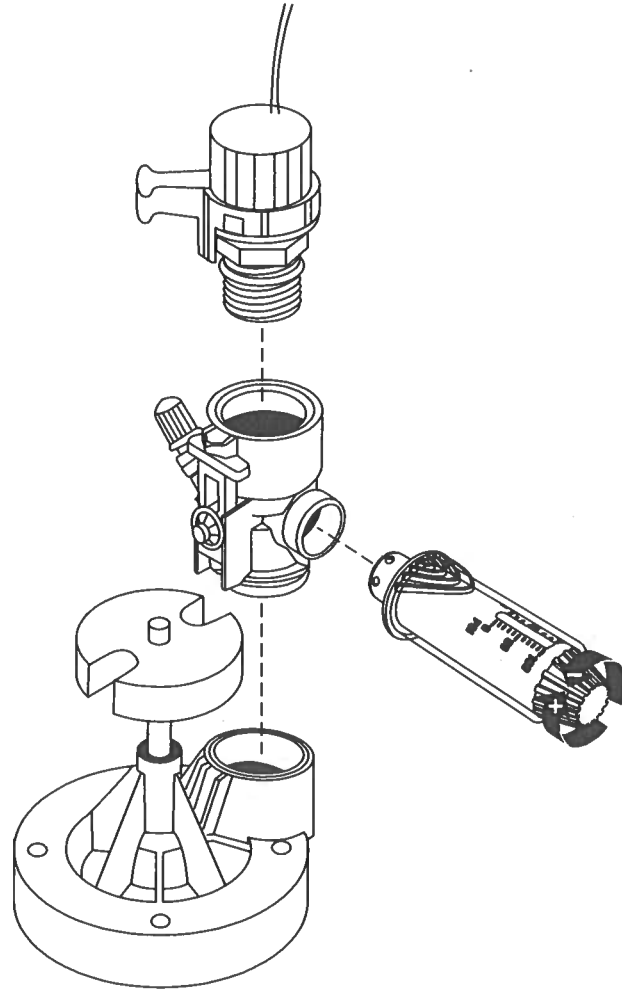
The regulator shall be installed between the plastic or brass valve bonnet and electric solenoid.

The regulator shall have a visible pressure indication scale ranging from 0-100 psi (0.0 to 6.90 bar). The protective cover shall snap tight to deter vandalism.

A schrader valve shall be installed to accommodate a pressure hose gauge for monitoring pressure.

The regulator shall be waterproof to prevent fogging the clear window and to prevent grit from binding internal components. The pressure shall be adjustable when the valve is manually internal bled or electronically activated.

The regulator construction shall be such as to provide replacing the dial cartridge without removing the regulator housing or disturbing the valve installation.



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The Intelligent Use of Water™
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Tim Garison

From: Tim Garison
Sent: Monday, June 17, 2024 10:42 AM
To: Michael Hinkelman
Cc: Jose Vega; Carson Bailey; John Cook
Subject: FW: Huntsville: PRICING - REV CPR37 PCO 61 - ADD PRV & LEAK REPAIR
Attachments: RB PEBSB Valve.pdf; RB PRS Dial.pdf

Michael:
Please price quickly.

From: Medrano, Raul <raul.medrano@pbk.com>
Sent: Monday, June 17, 2024 10:27 AM
To: Tim Garison <tim@durotechgc.com>; 'William Roberts' <wcroberts@huntsville-isd.org>
Cc: Steve Bross <steveb@durotechgc.com>; John Cook <johnnc@durotechgc.com>; Jose Vega <josev@durotechgc.com>; Jocelyn Ramos <JocelynR@durotechgc.com>; Heath Hawkins <heathh@durotechgc.com>; Ramirez, Edmund <Ed.Ramirez@PBK.com>
Subject: RE: Huntsville: PRICING - REV CPR37 PCO 61 - ADD PRV & LEAK REPAIR

CAUTION: This email originated from outside of the organization.

Good morning Tim, to address the irrigation line excess water pressure caused by the City tapping directly to the main, we propose the installation of attached valve downstream of the irrigation line RPZ.
Attached are cut sheets for the PEBSB 3" plastic valve and a PRS dial that attaches to the valve. Maldonado should be very familiar with these items. The PRS dial is rated for us to 100 psi for exact pressure regulation but can be used for up to 200 psi with small variations.
You could use sch 40 pvc from the source to this valve after the backflow, but recommended to use all sch 80 fittings. This can be installed in a standard rain bird VB Jumbo box and wired as a master valve.

Please review and let me know if you have any questions.

Raul Medrano

Senior Project Manager

p. 713-965-0608 m. 832-326-5099



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From: Tim Garrison <timg@durotechgc.com>

Sent: Thursday, June 13, 2024 7:32 AM

To: Medrano, Raul <raul.medrano@pbk.com>; 'William Roberts' <wcroberts@huntsville-isd.org>

Cc: Steve Bross <steveb@durotechgc.com>; John Cook <johnc@durotechgc.com>; Jose Vega <josev@durotechgc.com>; Jocelyn Ramos

<JocelynR@durotechgc.com>; Heath Hawkins <heathh@durotechgc.com>

Subject: Huntsville: PRICING - REV CPR37 PCO 61 - ADD PRV & LEAK REPAIR

Raul and Mr. Roberts:

Please see attached pricing for REV CPR 37 based upon change order basis for adding the PRVs and repairing two leaks. This pricing excludes adding a PRV at the fire line crossing Hornet Way. The pricing also excludes a PRV for the irrigation supply line at the BB/SB area. The COH tied the irrigation meter directly into the city water line. An RFI has been issued requesting information for a PRV on this line. Currently, there are reported leaks on the irrigation system. This change order pricing is exclusive of any costs for an irrigation PRV. Installation of a designed PRV for the irrigation system will require a CPR from PBK and separate change order pricing. Thank you.

Very truly yours,



Tim Garison, LEED AP, CPC
Senior Project Manager

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BUILDERS OF INTEGRITY

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