

TRANSMITTAL - NATIONAL PARK SERVICE

Transmittal No.: 32
Sheet: 1 of: 1

Park: Florissant Fossil Beds N.M. Project: Water System Contract No.: C157410C023 TO P12PD11095

Contractor: Bairco Construction, Inc. Subcontractor/Supplier:

Pkg. No.: Date: 8/9/12

NPS ACTION

Item No.	Specification Section No.	Paragraph No.	Description of Item (Size, Type, Name, Manufacturer, Use, Etc.)	No. of Copies Submitted	No. of Copies Returned	Approved	Approved with Notations	Disapproved - Resubmit
1	221313	2.1.A	Pipe and Fittings: Schedule 40 PVC	2				
2	221313	2.1.B	Pipe and Fittings: Infiltrator Quick 4 Plus	2				
3								
4								
5								
6								
7								
8								

Contractor Signature *Mark Oeschgen* Recommended by

Title, *P.W.* Date *8/9/12* Title

I hereby certify that this submittal has been reviewed for accuracy, completeness, and compliance with contract requirements (FAR 52.236-21)

Review Comments

Action By

Contracting Officer's Representative

Approval of this submittal is subject to the provisions of the contract drawings and specifications. This action is for general concurrence only and the Government is not responsible for errors or omission.

SUBMITTAL LOG DATES: From contractor [], To reviewer [], From reviewer [], To Contractor []
Distribution: () Contractor () DSC File () COR () A/E () DSC Interim () COR Interim () Contractor Interim



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→ PVC PRESSURE PIPE Schedule 40 – ASTM D-1785 Product Data

Northern Pipe Products PVC IPS Pressure-Rated SCH 40 Pipe is manufactured from compounds conforming to cell class 12454 in accordance with ASTM D-1784. The Belled End Pipe meets or exceeds specification ASTM D-2672, is made from potable water compounds, and carries the NSF Standard 14 mark of acceptance. The ¾ -inch and 1 ¼-inch through 12-inch diameter pipe sizes are also Canadian Standards Association Standard B137.3 listed. Well Casing Pipe meets or exceeds specification ASTM F-480 and is available in sizes 2-inch through 8-inch pipe sizes. Plain end and bell end pipe sizes 1 ¼ -inch through 12-inch are dual marked with specification ASTM D-2665 (Plastic Drain, Waste, and Vent Pipe). Pipe standard length is 20 feet. ¾" through 3" sizes represent overall length and 4" through 16" sizes represent laying length. Spigot ends are beveled and insertion depths are marked for correct installation.

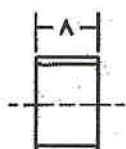
PVC Sch 40 Pressure Pipe Cell Classification 12454

Nominal Pipe Size Inches	Pipe O.D. Inches	Pipe Pressure Rating PSI	→ SCH 40 Plain End		SCH 40 Bell End		SCH 40 Well Casing	
			Min. Wall Inches	Weight 20' Lgth. Lbs./Ft.	Min. Wall Inches	Weight 20' Lgth. Lbs./Ft.	Min. Wall Inches	Weight 20' Lgth. Lbs./Ft.
¾	1.050	480	0.113	0.218	0.113	0.218		
1	1.315	450	0.133	0.323	0.133	0.323		
1 ¼	1.660	370	0.140	0.437	0.140	0.437		
1 ½	1.900	330	0.145	0.523	0.145	0.523		
2	2.375	280	0.154	0.703	0.154	0.703	0.154	0.703
2 ½	2.875	300	0.203	1.114	0.203	1.114	0.203	1.114
3	3.500	260	0.216	1.457	0.216	1.457	0.216	1.457
→ 4	4.500	220	0.237	2.080	0.237	2.130	0.237	2.130
4 ½	4.950		0.248	2.400	0.248	2.460	0.248	2.460
5	5.563	190	0.258	2.810	0.258	2.890	0.258	2.890
→ 6	6.625	180	0.280	3.650	0.280	3.760	0.280	3.760
8	8.625	160	0.322	5.490	0.322	5.850	0.322	5.850
10	10.750	140	0.365	7.790	0.365	8.040	0.365	8.040
12	12.750	130	0.406	10.300	0.406	10.670	0.406	10.670
14	14.000	130	0.437	12.200	0.437	12.620	0.437	12.620
16	16.000	130	0.500	15.930	0.500	16.550	0.500	16.550

ABS & PVC-DWV Fittings

5800 Series - ABS/4800 Series PVC

COUPLINGS (Continued)

5801-RP 4801-RP


Repair Coupling (Hub x Hub)

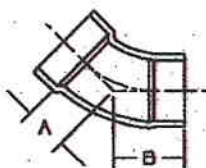
NOM. SIZE	ABS APPROX. NET WT./LBS.	PVC APPROX. NET WT./LBS.	DIM. A INCHES
1½	.062	.083	1½
2	.086	.115	1¾
3	.303	.417	3
4	.510	.711	3½
† 6	N/A	2.050	5¾

ELBOWS

5806 4806


45° Ell (Hub x Hub)

NOM. SIZE	ABS APPROX. NET WT./LBS.	PVC APPROX. NET WT./LBS.	DIM. A INCHES
1¼	.109	.151	1
1½	.131	.188	1½
2	.205	.281	1½
3	.616	.842	1¾
4	1.058	1.515	2¾
6	2.875	4.151	3¾
† 8	N/A	6.134	2½
† 8 x 6 F	N/A	10.234 \$	2½
† 8 x 4 F	N/A	10.130 \$	2½
10	N/A	19.64	2¾
12	N/A	32.12	3½

5806-2 4806-2


45° Street Ell (Spg x Hub)

NOM. SIZE	ABS APPROX. NET WT./LBS.	PVC APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1¼	.100 \$.136	1	1¾
1½	.134	.174	1½	1¾
2	.201	.277	1¾	2¼
3	.601	.818	1¾	3¼
4	1.048	1.464	2¾	3½
6	2.772	3.950	3¾	6¾
† 8	N/A	5.738	2½	6½
† 8 x 6 F	N/A	6.500 \$	2½	◆
† 8 x 4 F	N/A	6.200 \$	2½	◆

◆ Consult technical services for dimensions

† Available in PVC only

F Fabricated

\$ Made to order. Consult customer service for minimum order quantities and lead times



Innovative Water Treatment Through Environmentally Sustainable Solutions

Product Line

Benefits

Septic Product Line

QUICK4 PLUS CHAMBER SYSTEMS



Quick4 Plus Chamber Systems

The newest addition to the Infiltrator family of products is the Quick4 Plus Low Profile chamber line. This family of chambers provides maximum strength through their center structural columns. The low profile models include the Quick4 Plus Standard Low Profile (LP), the Quick4 Plus Equalizer 36 Low Profile (LP) and the Quick4 Plus Equalizer 36 StraightLock (SL) Low Profile (LP). At 8-inches tall, the Low Profile models are optimal for shallow installations.

Like the Quick4 chamber line, these chambers have a Contour Swivel Connection™ feature, which allows 10-degree turns, right or left, making it the perfect choice for tough terrain and tight job sites. They come in easy to handle four-foot lengths, providing the quickest drainfield installation in the onsite wastewater industry.

Two end caps are offered with the Quick4 Plus line of chambers, providing increased flexibility in system configurations. The Quick4 Plus Endcap offers a simple, flat design. The Quick4 Plus All-in-One Endcap may be used at the end of a chamber row or can be installed mid-trench to allow for a center feed. Inlet pipe connections to this end cap include the sides, ends and top. There are a variety of accessories available with the Quick4 Plus line of chambers.



Key Features and Benefits:

Shallow Placement

As a result of the augmented structural design, the new designs can be installed with as little as 6 inches of soil in shallow cover applications. At 8" tall the low profile chambers allow for shallow installations, allowing for less digging and better contact with the soil.

Augmented Structural Design

The Quick4 Plus design develops its structural capacity from a combination of support on the chamber "feet" and new interior load-bearing support column system allowing for installation in shallow cover applications.

Multi-Use Endcap Designs

The Quick4 Plus Endcap and the Quick4 Plus All-in-One Endcap can be utilized across the entire Quick4 Plus family of chambers. The two endcap designs increase flexibility in how septic systems can be configured offering a variety of inletting options and heights to meet any installation need.

Quick4 Plus High Capacity Chamber

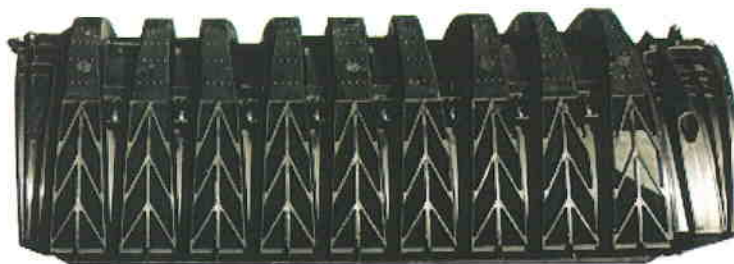
The Quick4 Plus High Capacity Chamber offers maximum strength through its two center structural columns. This chamber can be installed in a 36-inch-wide trench. Like the original line of Quick4 chambers, it offers advanced contouring capability with its Contour Swivel Connection™ which permits 10-degree turns, right and left. It is also available in four-foot lengths to provide optimal installation flexibility. The Quick4 Plus All-in-One 12 Endcap, and the Quick4 Periscope are available with this chamber, providing increased flexibility in system configurations.



Size (W x L x H) 34" x 53" x 14" (86 cm x 135 cm x 36 cm)
 Effective Length 48" (122 cm)

Quick4 Plus Standard Chamber

The Quick4 Plus Standard Chamber offers maximum strength through its two center structural columns. This chamber can be installed in a 36-inch-wide trench. Like the original line of Quick4 chambers, it offers advanced contouring capability with its Contour Swivel Connection™ which permits 10-degree turns, right and left. It is also available in four-foot lengths to provide optimal installation flexibility. The Quick4 Plus All-in-One 12 Endcap, and the Quick4 Periscope are available with this chamber, providing increased flexibility in system configurations.



Size (W x L x H) 34" x 53" x 12" (86 cm x 135 cm x 31 cm)
 Effective Length 48" (122 cm)

Quick4 Plus Standard Low Profile (LP) Chamber

The Quick4 Plus Standard Low Profile (LP) chamber can be installed in a 36-inch-wide trench. This chamber is 4 inches shorter in height than other standard model chambers allowing for shallower installations. The Quick4 Plus All-in-One and Quick4 Plus Endcaps are available with this chamber, providing increased flexibility in system configurations.



Size (W x L x H) 34" x 53" x 8" (86 cm x 135 cm x 20 cm)
 Effective Length 48" (122 cm)

Quick4 Plus EQ36 Low Profile (LP) Chamber

The Quick4 Plus Equalizer 36 Low Profile (LP) chamber can be installed in a 24-inch-wide trench. This chamber is 8 inches in height allowing for shallower installations. The Quick4 Plus All-in-One and the Quick4 Plus Endcaps are available with this chamber, providing increased flexibility in system configuration.



Size (W x L x H) 22" x 53" x 8" (56 cm x 135 cm x 20 cm)
 Effective Length 48" (122 cm)

Quick4 Plus All-in-One Endcap

The Quick4 Plus chambers are available with the Quick4 Plus All-in-One Endcaps. The Quick4 Plus All-in-One Endcap may be used at either end of a chamber row for an inlet/outlet or can be installed mid-trench. The mid-trench connection feature allows construction of chamber rows with center feed inletting, which allows for easy installation of serial distribution systems. Variable pipe connection options allow for side, end or top inletting.



Size (W x L x H).....18" x 10.4" x 8" (46 cm x 26 cm x 20 cm)
 Additional Length per Trench.....10.4" (26 cm)
 Invert Height.....3.3", 9" (8 cm, 23 cm)

Quick4 Plus Endcap

The Quick4 Plus chambers are also available with the Quick4 Plus Endcaps. The Quick4 Plus Endcap offers a simple, flat design and allows installation of a pipe from the end of the chamber rows. Piping drill points are set for gravity or pressure pipe.



Size (W x L x H).....18" x 4.5" x 8" (46 cm x 11 cm x 20 cm)
 Invert Height.....3.3" (8 cm)

Quick4 Plus All-in-One Periscope

The Quick4 Plus All-in-One Periscope allows for raised, invert installations with 180° directional inletting. Its 9 inch raised invert is great for serial applications.



Size (W x L x H).....5" x 9" x 6" (12.7 cm x 23 cm x 15 cm)
 Invert Height.....9" (23 cm)

Downloads

Q4 Plus Std Specification Sheet ([pdf](#))
 Q4 Plus Std LP Specification Sheet ([pdf](#))
 Q4 Plus EQ36 LP Specification Sheet ([pdf](#))
 Q4 Plus High Capacity Specification Sheet ([pdf](#))
 General Installation Instructions ([pdf](#))

Technical Specifications

Q4 Plus Standard LP ([cad](#)) ([pdf](#))
 Q4 Plus Equalizer 36 LP ([cad](#)) ([pdf](#))
 Q4 Plus All-in-One Endcap ([cad](#)) ([pdf](#))
 Q4 Plus Endcap ([cad](#)) ([pdf](#))
 Q4 Plus HC ([cad](#)) ([pdf](#))