

**From:** [Vernon Uy](#)  
**To:** [Peppers, Nicki:](#)  
**Subject:** re: Updated ROM and QPL #1  
**Date:** Tuesday, March 08, 2011 12:43:50 PM  
**Attachments:** [CatalogueCut-Shackles.pdf](#)  
[CatalogueCut-WireRope.pdf](#)  
[TransmittalSheet.pdf](#)

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Hi Nicki.

Attached are the catalogue cuts of the wire rope and shackles for the Unconfined Bubble Curtain. Hard copy is in the mail.

Thanks for your patience.

Vernon Uy  
American Construction Company, Inc.  
(425) 870-3217

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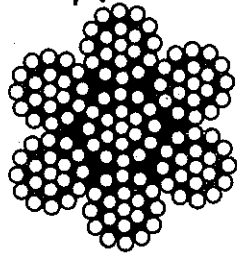
**From:** "Peppers, Nicki" <peppersn@columbiarivercrossing.com>  
**Sent:** Monday, March 07, 2011 3:35 PM  
**To:** vernonu@americanconstco.com  
**Subject:** Updated ROM and QPL #1

Hi Vernon,  
Please find attached the current ROM and the QPL for painting.  
I still need a cat cut for the wire and rope. It is highlighted on the ROM.  
Also, I am still waiting for approved RAM Numbers 8,9,10,11,12 and 13.  
Once I receive them, I will send you a copy.

Thanks,  
Nicki

\*\*\* eSafe scanned this email for malicious content \*\*\*  
\*\*\* IMPORTANT: Do not open attachments from unrecognized senders \*\*\*

# Galv. and Stainless Wire Rope



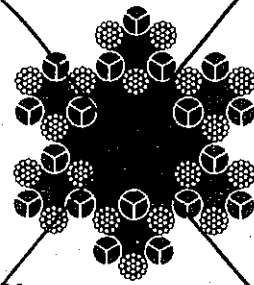
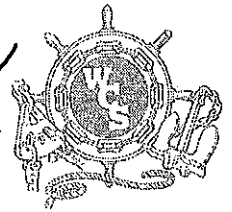
## 7 x 19 Aircraft Cable

Diameter in Inches	Diameter in Millimeters	Approximate Weight Per 100 Feet In Pounds	Galvanized Or Stainless Steel	
			Nominal Strength In Pounds Galvanized	Stainless
1/16	1.6	.7	480	480
3/32	2.5	1.7	1,000	920
7/64	2.8	2.2	1,400	1,260
1/8	3.2	2.9	2,000	1,760
5/32	4.0	4.5	2,800	2,400
3/16	4.8	6.5	4,200	3,700
7/32	5.5	8.6	5,600	5,000
1/4	6.3	11.0	7,000	6,400
9/32	7.5	13.9	8,000	7,800
5/16	8.0	17.3	9,800	9,000
11/32	8.7	20.7	12,500	10,500
3/8	9.5	24.3	14,400	12,200
*7/16	11.1	35.6	16,000	16,300
*1/2	12.7	45.8	20,600	22,800

Note: 1/16 through 3/8 also available in 7 x 7  
\*6 x 19 IWRC

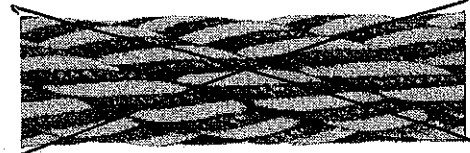
Used in a variety of applications, these small ropes are fabricated to uniform size and quality. For example, 1/16" 7x19 contains 133 separate wires, making the wires approximately the diameter of a human hair—but still provides strength, bendability, and fatigue resistance.

These cables have been historically called "Aircraft" cable—but since most applications do not require the special marking, lubrication and testing, a utility cable is provided.



## Spring-Lay

Diameter Inches	Galvanized Fiber Core	
	Approx. Weight Per Foot Pounds	Minimum Breaking Strength Tons Of 2,000 Lb.
1/2	.22	4.47
9/16	.28	5.64
5/8	.34	6.95
3/4	.49	9.96
7/8	.63	13.5
1	.88	17.5
1-1/8	1.14	22.1
1-1/4	1.36	27.2
1-3/8	1.66	32.8
1-1/2	1.97	38.9
1-5/8	2.28	45.6
1-3/4	2.67	52.7
1-7/8	3.09	60.3
2	3.53	68.5
2-1/4	4.56	86.3
2-1/2	5.44	106.
2-3/4	6.65	127.



Spring-Lay is used for marine towing and mooring lines. High in strength—for strength equal to manila rope it only needs to be one-half the diameter, and its weight is less than manila rope of equal strength.

**Marine Construction Dredging Pile Driving**

1501 Taylor Way • Tacoma, Washington 98421

PHONES: Tacoma (253) 254-0118,

Seattle (206) 623-0114,

Fax (253) 254-0155



**AMERICAN  
CONSTRUCTION COMPANY**

CONTRACTORS LIC NO. 223-01-AM-ER-IC\*372 NO.

**DATE** March 8, 2011

**TO:**

Columbia River Crossing Project Office  
700 Washington Street, Suite 300  
Vancouver, WA 98660

Attn: Frank Green, P.E.

**JOB #:** MC 02-11

**TITLE:** Columbia River Bridge Temporary  
Pile Test Program (#8078)

THE FOLLOWING ITEMS ARE BEING SENT:

Herewith

Under Separate Cover

Direct

<b>X</b>

QUANTITY	DESCRIPTION
	<b>BID ITEM 3.14: Catalogue Cut of Wire Rope &amp; Shackles (from WA Chain &amp; Supply, Inc.)</b>
1 EA	7x19 Aircraft Cable (galvanized): 3/16" OD and 1/4" OD diameters
1 EA	1/2" shackles (galvanized): 2-ton working load limit

These items are being sent:

- |          |  |
|----------|--|
| <b>X</b> | Per your request                       |
| <b>X</b> | Please keep us advised of action taken |
| <b>X</b> | For you to process                     |
| <b>X</b> | For your inspection and approval       |
| <b>X</b> | For your general information and file  |
| <b>X</b> | For your approval or corrections       |

**REMARKS:**

Please contact us promptly if there is a problem or question

**COPY TO:**

[Empty rounded rectangular box for copy to information]

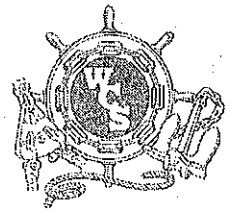
**AMERICAN CONSTRUCTION COMPANY, INC.**

**BY:**

*[Handwritten signature]*

Vernon Uy

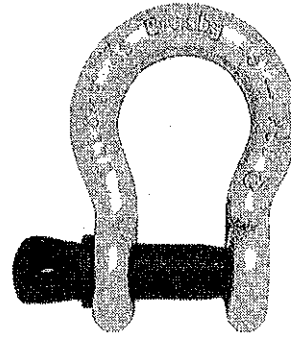
# Forged Anchor Shackles



Load Rated **QUIC-CHECK®**

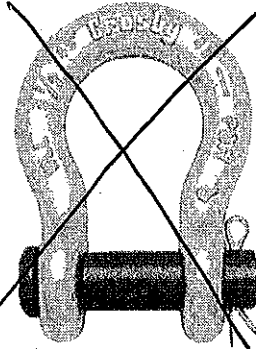


- Working Load Limit permanently shown on every shackle.
- Forged – Quenched and Tempered, with alloy pins.
- Capacities 1/3 thru 55 metric tons.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Hot Dip galvanized or ~~Self Colored.~~
- Fatigue rated.



### Screw Pin

Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271D Type IVA, Grade A, Class 2, except for those provisions required of the contractor.



~~Round Pin G-213 S-213~~  
~~Round pin anchor shackles meet the performance requirements of Federal Specification RR-C-271D Type IVA, Grade A, Class 2, except for those provisions required of the contractor.~~

**Do Not Side Load Round Pin Shackles**

## Anchor Shackles

THIS ONE!

Working* Load Limit (Tons)	Nominal Shackle Size (In.)	Dimensions (In.)							Weight (Lbs.)	
		Inside Length	Inside Width		Diameter		Tolerance Plus or Minus		213	209
			at Pin	at Bow	Pin	Outside of Eye	Length	Width		
1/3†	3/16	7/8	3/8	11/16	1/4	9/16	1/16	1/16	—	.05
1/2	1/4	1-1/8	1/2	25/32	5/16	11/16	1/16	1/16	.13	.12
3/4	5/16	1-7/32	17/32	27/32	3/8	13/16	1/16	1/16	.17	.19
1	3/8	1-7/16	21/32	1-1/32	7/16	31/32	1/8	1/16	.25	.31
1-1/2	7/16	1-11/16	23/32	1-5/32	1/2	1-1/16	1/8	1/16	.38	.38
2	1/2	1-7/8	13/16	1-5/16	5/8	1-3/16	1/8	1/16	.70	.63
3-1/4	5/8	2-3/8	1-1/16	1-11/16	3/4	1-9/16	1/8	1/16	1.50	1.38
4-3/4	3/4	2-13/16	1-1/4	2	7/8	1-7/8	1/4	1/16	2.32	2.25
6-1/2	7/8	3-5/16	1-7/16	2-9/32	1	2-1/8	1/4	1/16	3.40	3.38
8-1/2	1	3-3/4	1-11/16	2-11/16	1-1/8	2-3/8	1/4	1/16	5.00	5.32
9-1/2	1-1/8	4-1/4	1-13/16	2-29/32	1-1/4	2-5/8	1/4	1/16	6.97	6.81
12	1-1/4	4-11/16	2-1/32	3-1/4	1-3/8	3	1/4	1/16	9.75	9.50
13-1/2	1-3/8	5-3/16	2-1/4	3-1/2	1-1/2	3-5/16	1/4	1/8	13.25	13.25
17	1-1/2	5-3/4	2-3/8	3-7/8	1-5/8	3-5/8	1/4	1/8	17.25	17.70
25	1-3/4	7	2-7/8	5	2	4-5/16	3/4	1/8	29.46	30.38
35	2	7-3/4	3-1/4	5-3/4	2-1/4	5	3/4	1/8	45.75	45.00
55†	2-1/2	10-1/2	4-1/8	7-1/4	2-3/4	6	3/4	1/4	—	85.75

\*Working Load Limit for vertical in-line pull. † Furnished in screw pin only.