

## Bridge Preservation Seismic Retrofit Projects Funded by the 2005 Transportation Partnership Account

(Sorted by bridge number)

| Project # | Bridge Number | Bridge Name              | Milepost | Region  | Project Year | Project Name |
|-----------|---------------|--------------------------|----------|---------|--------------|--------------|
| 12        | 3/123E        | ERLAND POINT RD OC       | 40.44    | Olympic | 2012         | Project B    |
| 12        | 3/123W        | ERLAND POINT RD OC       | 40.44    | Olympic | 2012         | Project B    |
| 12        | 3/124E        | CHICO I/C OC             | 41.09    | Olympic | 2012         | Project B    |
| 12        | 3/124W        | CHICO I/C OC             | 41.09    | Olympic | 2012         | Project B    |
| 12        | 3/128E        | NEWBERRY HILL RD OC      | 43.48    | Olympic | 2012         | Project B    |
| 12        | 3/128W        | NEWBERRY HILL RD OC      | 43.48    | Olympic | 2012         | Project B    |
| 12        | 3/130W        | ANDERSON HILL RD OC      | 44.7     | Olympic | 2012         | Project B    |
| 17        | 5/321         | CAPITOL LAKE             | 104.52   | Olympic | 2012         | Project E    |
| 10        | 5/325A        | N-14TH RAMP,OWR&N RR OC  | 105.45   | Olympic | 2010         | Project D    |
| 10        | 5/325S-W      | HENDERSON BLVD,UPRR OC   | 105.46   | Olympic | 2010         | Project D    |
| 10        | 5/332         | PACIFIC AVE OC           | 107.45   | Olympic | 2010         | Project D    |
| 10        | 5/337E        | MARTIN WAY OC            | 109.14   | Olympic | 2010         | Project D    |
| 10        | 5/337W        | MARTIN WAY OC            | 109.12   | Olympic | 2010         | Project D    |
| 10        | 5/339         | I-5 OC, CARPENTER RD     | 110.4    | Olympic | 2010         | Project D    |
| 10        | 5/341         | I-5 OC, MERIDIAN RD      | 113.08   | Olympic | 2010         | Project D    |
| 17        | 5/342E        | MCALLISTER CR            | 114.09   | Olympic | 2012         | Project E    |
| 17        | 5/342W        | MCALLISTER CR            | 114.09   | Olympic | 2012         | Project E    |
| 10        | 5/345W        | NISQUALLY R              | 114.86   | Olympic | 2010         | Project D    |
| 10        | 5/406         | I-5 OC, OLD NISQUALLY RD | 116.7    | Olympic | 2010         | Project D    |
| 10        | 5/411E        | FT LEWIS RD OC           | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/411NCD      | NBCD FT LEWIS RD OC      | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/411SCD      | SBCD FT LEWIS RD OC      | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/411W        | FT LEWIS RD OC           | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/418         | I-5 OC, BRIDGEPORT WAY   | 125.86   | Olympic | 2010         | Project D    |
| 10        | 5/428         | I-5 OC, S 56TH ST        | 130.69   | Olympic | 2010         | Project D    |
| 12        | 16/130E       | ROSEDALE RD OC           | 12.76    | Olympic | 2012         | Project B    |
| 12        | 16/130W       | ROSEDALE RD OC           | 12.77    | Olympic | 2012         | Project B    |
| 11        | 101/138       | W FK HOQUIAM R           | 96.69    | Olympic | 2012         | Project A    |
| 11        | 101/147       | BIG CREEK                | 102.61   | Olympic | 2012         | Project A    |
| 11        | 101/149       | HUMPTULIPS OVERFLOW      | 108.84   | Olympic | 2012         | Project A    |
| 11        | 101/150       | HUMPTULIPS R             | 109      | Olympic | 2012         | Project A    |
| 12        | 101/266       | DUCKABUSH R              | 310.22   | Olympic | 2012         | Project B    |
| 12        | 166/24        | SR 166 OC                | 3.97     | Olympic | 2012         | Project B    |
| 13        | 303/12        | PORT WASHINGTON CS1840   | 0.73     | Olympic | 2012         | Project C    |
| 12        | 305/10        | AGATE PASS               | 6.82     | Olympic | 2012         | Project B    |

Total Number of Bridges = 35



## Bridge Preservation Seismic Retrofit Projects Funded by the 2005 Transportation Partnership Account

(Sorted by Proposed Project Number)

| Project # | Bridge Number | Bridge Name              | Milepost | Region  | Project Year | Project Name |
|-----------|---------------|--------------------------|----------|---------|--------------|--------------|
| 10        | 5/325A        | N-14TH RAMP,OWR&N RR OC  | 105.45   | Olympic | 2010         | Project D    |
| 10        | 5/325S-W      | HENDERSON BLVD,UPRR OC   | 105.46   | Olympic | 2010         | Project D    |
| 10        | 5/332         | PACIFIC AVE OC           | 107.45   | Olympic | 2010         | Project D    |
| 10        | 5/337E        | MARTIN WAY OC            | 109.14   | Olympic | 2010         | Project D    |
| 10        | 5/337W        | MARTIN WAY OC            | 109.12   | Olympic | 2010         | Project D    |
| 10        | 5/339         | I-5 OC, CARPENTER RD     | 110.4    | Olympic | 2010         | Project D    |
| 10        | 5/341         | I-5 OC, MERIDIAN RD      | 113.08   | Olympic | 2010         | Project D    |
| 10        | 5/345W        | NISQUALLY R              | 114.86   | Olympic | 2010         | Project D    |
| 10        | 5/406         | I-5 OC, OLD NISQUALLY RD | 116.7    | Olympic | 2010         | Project D    |
| 10        | 5/411E        | FT LEWIS RD OC           | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/411NCD      | NBCD FT LEWIS RD OC      | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/411SCD      | SBCD FT LEWIS RD OC      | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/411W        | FT LEWIS RD OC           | 120.87   | Olympic | 2010         | Project D    |
| 10        | 5/418         | I-5 OC, BRIDGEPORT WAY   | 125.86   | Olympic | 2010         | Project D    |
| 10        | 5/428         | I-5 OC, S 56TH ST        | 130.69   | Olympic | 2010         | Project D    |
| 11        | 101/138       | W FK HOQUIAM R           | 96.69    | Olympic | 2012         | Project A    |
| 11        | 101/147       | BIG CREEK                | 102.61   | Olympic | 2012         | Project A    |
| 11        | 101/149       | HUMPTULIPS OVERFLOW      | 108.84   | Olympic | 2012         | Project A    |
| 11        | 101/150       | HUMPTULIPS R             | 109      | Olympic | 2012         | Project A    |
| 12        | 3/123E        | ERLAND POINT RD OC       | 40.44    | Olympic | 2012         | Project B    |
| 12        | 3/123W        | ERLAND POINT RD OC       | 40.44    | Olympic | 2012         | Project B    |
| 12        | 3/124E        | CHICO I/C OC             | 41.09    | Olympic | 2012         | Project B    |
| 12        | 3/124W        | CHICO I/C OC             | 41.09    | Olympic | 2012         | Project B    |
| 12        | 3/128E        | NEWBERRY HILL RD OC      | 43.48    | Olympic | 2012         | Project B    |
| 12        | 3/128W        | NEWBERRY HILL RD OC      | 43.48    | Olympic | 2012         | Project B    |
| 12        | 3/130W        | ANDERSON HILL RD OC      | 44.7     | Olympic | 2012         | Project B    |
| 12        | 16/130E       | ROSEDALE RD OC           | 12.76    | Olympic | 2012         | Project B    |
| 12        | 16/130W       | ROSEDALE RD OC           | 12.77    | Olympic | 2012         | Project B    |
| 12        | 101/266       | DUCKABUSH R              | 310.22   | Olympic | 2012         | Project B    |
| 12        | 166/24        | SR 166 OC                | 3.97     | Olympic | 2012         | Project B    |
| 12        | 305/10        | AGATE PASS               | 6.82     | Olympic | 2012         | Project B    |
| 13        | 303/12        | PORT WASHINGTON CS1840   | 0.73     | Olympic | 2012         | Project C    |
| 17        | 5/321         | CAPITOL LAKE             | 104.52   | Olympic | 2012         | Project E    |
| 17        | 5/342E        | MCALLISTER CR            | 114.09   | Olympic | 2012         | Project E    |
| 17        | 5/342W        | MCALLISTER CR            | 114.09   | Olympic | 2012         | Project E    |

Total Number of Bridges = 35



# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |   |                                |   |                           |   |  |
|--|-----------------------|---|--------------------------------|---|---------------------------|---|--|
| <b>Structure ID:</b> 0007883B                  |                       | <b>Bridge Name:</b><br>ERLAND POINT RD OC |                                | <b>Route:</b><br>3                      | <b>Milepost:</b><br>40.44 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 3/123E                   |                       |   |                                |   |                           | <b>County:</b> Kitsap                         |  |
| <b>Location:</b><br>5.6 N JCT SR 304           |                       | <b>Longitude:</b><br>122 41 56 "          | <b>Latitude:</b><br>47 35 47 " | <b>Structure Length:</b><br>160 ft.     |                           | <b>Out to Out Width:</b><br>34.8 ft.          |  |
| <b>Feature Intersected:</b><br>ERLAND POINT RD |                       | <b>PGA:</b><br>33.09 %g                   | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1966                        | <b>ADT:</b> 24150     | <b>Detour Length:</b><br>1 miles          | <b>Skew Angle:</b><br>7        | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |  |
| <b>Year Rebuilt:</b>                           | <b>Truck Pct:</b> 9 % |   |                                |   |                           |   |  |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are spill through abutments. Each pier has two 3'-0" diameter columns on spread footings.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$108,300.50**

**Estimated Total Retrofit Project Cost: \$194,940.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |   |                                  |   |                           |   |
|--|-----------------------|---|----------------------------------|---|---------------------------|---|
| <b>Structure ID:</b> 0007883C                  |                       | <b>Bridge Name:</b><br>ERLAND POINT RD OC |                                  | <b>Route:</b><br>3                      | <b>Milepost:</b><br>40.44 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 3/123W                   |                       |   |                                  |   |                           | <b>County:</b> Kitsap                         |
| <b>Location:</b><br>5.6 N JCT SR 304           |                       | <b>Longitude:</b><br>122 41 53.5 "        | <b>Latitude:</b><br>47 35 46.8 " | <b>Structure Length:</b><br>160 ft.     |                           | <b>Out to Out Width:</b><br>35 ft.            |
| <b>Feature Intersected:</b><br>ERLAND POINT RD |                       | <b>PGA:</b><br>33.09 %g                   | <b>Seismic Zone:</b><br>C        | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1966                        | <b>ADT:</b> 24150     | <b>Detour Length:</b><br>1 miles          | <b>Skew Angle:</b><br>3          | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                           | <b>Truck Pct:</b> 9 % |   |                                  |   |                           |   |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are spill through abutments. Each pier has two 3'-0" diameter columns on spread footings.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$99,291.50**

**Estimated Total Retrofit Project Cost: \$178,724.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |                                     |                                |   |                           |   |
|--|-----------------------|-------------------------------------|--------------------------------|---|---------------------------|---|
| <b>Structure ID:</b> 0008976A            |                       | <b>Bridge Name:</b><br>CHICO I/C OC |                                | <b>Route:</b><br>3                      | <b>Milepost:</b><br>41.09 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 3/124E             |                       |                                     |                                |   |                           | <b>County:</b> Kitsap                         |
| <b>Location:</b><br>6.3 N JCT SR 304     |                       | <b>Longitude:</b><br>122° 42' 18"   | <b>Latitude:</b><br>47° 36' 6" | <b>Structure Length:</b><br>208 ft.     |                           | <b>Out to Out Width:</b><br>41.5 ft.          |
| <b>Feature Intersected:</b><br>CHICO I/C |                       | <b>PGA:</b><br>33.09 %g             | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1971                  | <b>ADT:</b> 23623     | <b>Detour Length:</b><br>1 miles    | <b>Skew Angle:</b><br>26       | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                     | <b>Truck Pct:</b> 9 % |                                     |                                |   |                           |   |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.). 7' excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$108,603.00**

**Estimated Total Retrofit Project Cost: \$195,485.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |                                     |                               |   |                           |   |
|--|-----------------------|-------------------------------------|-------------------------------|---|---------------------------|---|
| <b>Structure ID:</b> 0008976B            |                       | <b>Bridge Name:</b><br>CHICO I/C OC |                               | <b>Route:</b><br>3                      | <b>Milepost:</b><br>41.09 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 3/124W             |                       |                                     |                               |   |                           | <b>County:</b> Kitsap                         |
| <b>Location:</b><br>6.3 N JCT SR 304     |                       | <b>Longitude:</b><br>122 42 18 "    | <b>Latitude:</b><br>47 36 6 " | <b>Structure Length:</b><br>208 ft.     |                           | <b>Out to Out Width:</b><br>41.5 ft.          |
| <b>Feature Intersected:</b><br>CHICO I/C |                       | <b>PGA:</b><br>33.09 %g             | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1971                  | <b>ADT:</b> 23623     | <b>Detour Length:</b><br>1 miles    | <b>Skew Angle:</b><br>26      | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                     | <b>Truck Pct:</b> 9 % |                                     |                               |   |                           |   |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.). 8' excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$121,077.00**

**Estimated Total Retrofit Project Cost: \$217,938.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                       |  |                                |   |                           |   |
|---|-----------------------|--|--------------------------------|---|---------------------------|---|
| <b>Structure ID:</b> 0009269B                   |                       | <b>Bridge Name:</b><br>NEWBERRY HILL RD OC |                                | <b>Route:</b><br>3                      | <b>Milepost:</b><br>43.48 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 3/128E                    |                       |  |                                |   |                           | <b>County:</b> Kitsap                         |
| <b>Location:</b><br>8.7 N JCT SR 304            |                       | <b>Longitude:</b><br>122 42 25 "           | <b>Latitude:</b><br>47 38 12 " | <b>Structure Length:</b><br>232 ft.     |                           | <b>Out to Out Width:</b><br>40.3 ft.          |
| <b>Feature Intersected:</b><br>NEWBERRY HILL RD |                       | <b>PGA:</b><br>33.09 %g                    | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1972                         | <b>ADT:</b> 17431     | <b>Detour Length:</b><br>1 miles           | <b>Skew Angle:</b><br>37       | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                            | <b>Truck Pct:</b> 9 % |  |                                |   |                           |   |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #10 bars have 3'-9" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments on piles.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$82,819.00**

**Estimated Total Retrofit Project Cost: \$149,074.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                       |  |                                |   |                           |   |
|---|-----------------------|--|--------------------------------|---|---------------------------|---|
| <b>Structure ID:</b> 0009269C                   |                       | <b>Bridge Name:</b><br>NEWBERRY HILL RD OC |                                | <b>Route:</b><br>3                      | <b>Milepost:</b><br>43.48 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 3/128W                    |                       |  |                                |   |                           | <b>County:</b> Kitsap                         |
| <b>Location:</b><br>8.7 N JCT SR 304            |                       | <b>Longitude:</b><br>122 42 25 "           | <b>Latitude:</b><br>47 38 12 " | <b>Structure Length:</b><br>241 ft.     |                           | <b>Out to Out Width:</b><br>40.3 ft.          |
| <b>Feature Intersected:</b><br>NEWBERRY HILL RD |                       | <b>PGA:</b><br>33.09 %g                    | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1972                         | <b>ADT:</b> 17431     | <b>Detour Length:</b><br>1 miles           | <b>Skew Angle:</b><br>37       | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                            | <b>Truck Pct:</b> 9 % |  |                                |   |                           |   |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #10 bars have 3'-9" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments on piles.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$98,719.50**

**Estimated Total Retrofit Project Cost: \$177,695.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                       |  |                                   |   |                          |   |  |
|---|-----------------------|--|-----------------------------------|---|--------------------------|---|--|
| <b>Structure ID:</b> 0009124A                   |                       | <b>Bridge Name:</b><br>ANDERSON HILL RD OC |                                   | <b>Route:</b><br>3                      | <b>Milepost:</b><br>44.7 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 3/130W                    |                       |  |                                   |   |                          | <b>County:</b> Kitsap                         |  |
| <b>Location:</b><br>9.9 N JCT SR 304            |                       | <b>Longitude:</b><br>122° 42' 22"          | <b>Latitude:</b><br>47° 39' 14.5" | <b>Structure Length:</b><br>146 ft.     |                          | <b>Out to Out Width:</b><br>40.3 ft.          |  |
| <b>Feature Intersected:</b><br>ANDERSON HILL RD |                       | <b>PGA:</b><br>32.09 %g                    | <b>Seismic Zone:</b><br>C         | <b>Span Type:</b><br>PCB                |                          | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1972                         | <b>ADT:</b> 14685     | <b>Detour Length:</b><br>4 miles           | <b>Skew Angle:</b><br>9           | <b>Pier Type:</b><br>Double Column Pier |                          | <b>Footing Type:</b>                          |  |
| <b>Year Rebuilt:</b>                            | <b>Truck Pct:</b> 9 % |  |                                   |   |                          |   |  |



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments on piles.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$118,349.00**

**Estimated Total Retrofit Project Cost: \$213,028.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                        |                                     |                               |  |                            |   |
|---|------------------------|-------------------------------------|-------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0005090A               |                        | <b>Bridge Name:</b><br>CAPITOL LAKE |                               | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>104.52 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/321                 |                        |                                     |                               |  |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>0.5 N JCT US 101        |                        | <b>Longitude:</b><br>122 54 6 "     | <b>Latitude:</b><br>47 1 24 " | <b>Structure Length:</b><br>392 ft.                  |                            | <b>Out to Out Width:</b><br>210 ft.           |
| <b>Feature Intersected:</b><br>CAPITOL LAKE |                        | <b>PGA:</b><br>25.85 %g             | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>CBOX                            |                            | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1956                     | <b>ADT:</b> 45733      | <b>Detour Length:</b><br>8 miles    | <b>Skew Angle:</b><br>0       | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b><br>Concrete Pile         |
| <b>Year Rebuilt:</b> 1986                   | <b>Truck Pct:</b> 12 % |                                     |                               |  |                            |   |



**Bridge Notes:**

Retrofit 4 center columns at piers 2, 3 and 4 (built in 1956). These columns are 4'-0"x4'-0" square columns with #3 hoops @12". Longitudinal bars are #11 bars spliced at more than 2 locations, splice length is 2'-4". Footings are combined footings with top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 4 columns near center line at Pier 2, 3 and 4 only. (12 total, 48"x48")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 8

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$1,505,058.50**

**Estimated Total Retrofit Project Cost: \$2,709,105.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |   |                               |  |                            |   |  |
|--|-----------------------|---|-------------------------------|--|----------------------------|---|--|
| <b>Structure ID:</b> 0005295C                |                       | <b>Bridge Name:</b><br>N-14TH RAMP, OWR&N RR OC |                               | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>105.45 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 5/325A                 |                       |   |                               |  |                            | <b>County:</b> Thurston                       |  |
| <b>Location:</b><br>1.4 N JCT US 101         |                       | <b>Longitude:</b><br>122° 53' 30"               | <b>Latitude:</b><br>47° 2' 6" | <b>Structure Length:</b><br>275 ft.                  |                            | <b>Out to Out Width:</b><br>49.2 ft.          |  |
| <b>Feature Intersected:</b><br>PLUM ST, UPRR |                       | <b>PGA:</b><br>25.85 %g                         | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>CBOX                            |                            | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1957                      | <b>ADT:</b> 8590      | <b>Detour Length:</b><br>2 miles                | <b>Skew Angle:</b><br>24      | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b><br>Concrete Pile         |  |
| <b>Year Rebuilt:</b> 1986                    | <b>Truck Pct:</b> 2 % |   |                               |  |                            |   |  |



**Bridge Notes:**

Piers 2, 3 and 4, each has four 24"x24" square columns, #3 hoops @ 12", #11 longitudinal bars spliced at top of footing and mid-height with 2'-4" splices. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 24"x24")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$485,941.50**

**Estimated Total Retrofit Project Cost: \$874,694.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                       |   |                              |   |                            |   |  |
|---|-----------------------|---|------------------------------|---|----------------------------|---|--|
| <b>Structure ID:</b> 0005295D                         |                       | <b>Bridge Name:</b><br>HENDERSON BLVD,UPRR OC |                              | <b>Route:</b><br>5                      | <b>Milepost:</b><br>105.46 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 5/325S-W                        |                       |   |                              |   |                            | <b>County:</b> Thurston                       |  |
| <b>Location:</b><br>1.4 N JCT US 101                  |                       | <b>Longitude:</b><br>122 53 30 "              | <b>Latitude:</b><br>47 2 6 " | <b>Structure Length:</b><br>228 ft.     |                            | <b>Out to Out Width:</b><br>43 ft.            |  |
| <b>Feature Intersected:</b><br>HENDERSON BLVD,UPRR OC |                       | <b>PGA:</b><br>25.85 %g                       | <b>Seismic Zone:</b><br>C    | <b>Span Type:</b><br>CTB                |                            | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1957                               | <b>ADT:</b> 3234      | <b>Detour Length:</b><br>2 miles              | <b>Skew Angle:</b><br>0      | <b>Pier Type:</b><br>Double Column Pier |                            | <b>Footing Type:</b><br>Concrete Pile         |  |
| <b>Year Rebuilt:</b> 1990                             | <b>Truck Pct:</b> 5 % |   |                              |   |                            |   |  |



**Bridge Notes:**

Piers 2, 3 and 4, each has two 5'-0" diameter columns. Retrofit south columns (built in 1957) only. These columns have #3 hoops @12", longitudinal #10 bars have splices at top of footing and mid-height. Splice lengths are 2'-2". Footings have no top mat.

**Retrofit Program Notes:**

Bridge widened in 1990. Adds one column to the existing one column.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 3 south columns built in 1957 only. (1 per pier, 5' dia.). 10' excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$240,603.00**

**Estimated Total Retrofit Project Cost: \$433,085.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                       |                                 |  |                            |   |
|--|------------------------|---------------------------------------|---------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0005455A              |                        | <b>Bridge Name:</b><br>PACIFIC AVE OC |                                 | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>107.45 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/332                |                        |                                       |                                 |  |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>3.2 N JCT US 101       |                        | <b>Longitude:</b><br>122 51 6.7 "     | <b>Latitude:</b><br>47 2 28.1 " | <b>Structure Length:</b><br>351 ft.                  |                            | <b>Out to Out Width:</b><br>138 ft.           |
| <b>Feature Intersected:</b><br>PACIFIC AVE |                        | <b>PGA:</b><br>25.85 %g               | <b>Seismic Zone:</b><br>C       | <b>Span Type:</b><br>CBOX POBX                       |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1957                    | <b>ADT:</b> 121768     | <b>Detour Length:</b><br>0 miles      | <b>Skew Angle:</b><br>0         | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b><br>Concrete Pile         |
| <b>Year Rebuilt:</b> 1987                  | <b>Truck Pct:</b> 10 % |                                       |                                 |  |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has four 6'-0" diameter columns. Retrofit two center columns per pier (built in 1957) only. These columns have #4 hoops @ 12", longitudinal #14 bars have splices at top of pedestal. Splice lengths are 2'-10". Footings have no top mat. Longitudinal expansion joints between bridges built in 1957 and widening portion built in 1987.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit two columns near centerline of bridge at piers 2 and 3 (6' dia.). Replace Retaining walls.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$233,260.50**

**Estimated Total Retrofit Project Cost: \$419,868.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                        |                                      |                              |  |                            |   |
|---|------------------------|--------------------------------------|------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0008100B             |                        | <b>Bridge Name:</b><br>MARTIN WAY OC |                              | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>109.14 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/337E              |                        |                                      |                              |  |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>5.0 N JCT US 101      |                        | <b>Longitude:</b><br>122 49 6 "      | <b>Latitude:</b><br>47 3 0 " | <b>Structure Length:</b><br>282 ft.                  |                            | <b>Out to Out Width:</b><br>55 ft.            |
| <b>Feature Intersected:</b><br>MARTIN WAY |                        | <b>PGA:</b><br>27.09 %g              | <b>Seismic Zone:</b><br>C    | <b>Span Type:</b><br>PCB                             |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1967                   | <b>ADT:</b> 60884      | <b>Detour Length:</b><br>0 miles     | <b>Skew Angle:</b><br>50     | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b> 1988                 | <b>Truck Pct:</b> 10 % |                                      |                              |  |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit three center columns per pier (built in 1967) only. These columns have #4 hoops @12", longitudinal #11 bars have splices at top of footings. Splice lengths are 4'-2". Footings have no top mat.

**Retrofit Program Notes:**

Widened in 1988, added one column on each side.

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 & 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.). 14' deep excavation.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$253,577.50**

**Estimated Total Retrofit Project Cost: \$456,439.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                               |                        |                       |                      |                                 |                       |                          |
|-------------------------------|------------------------|-----------------------|----------------------|---------------------------------|-----------------------|--------------------------|
| <b>Structure ID:</b> 0008100A |                        | <b>Bridge Name:</b>   |                      | <b>Route:</b>                   | <b>Milepost:</b>      | <b>Region:</b> Olympic   |
| <b>Bridge Number:</b> 5/337W  |                        | MARTIN WAY OC         |                      | 5                               | 109.14                | <b>County:</b> Thurston  |
| <b>Location:</b>              |                        | <b>Longitude:</b>     | <b>Latitude:</b>     | <b>Structure Length:</b>        |                       | <b>Out to Out Width:</b> |
| 5.0 N JCT US 101              |                        | 122 49 6 "            | 47 3 0 "             | 276 ft.                         |                       | 55 ft.                   |
| <b>Feature Intersected:</b>   |                        | <b>PGA:</b>           | <b>Seismic Zone:</b> | <b>Span Type:</b>               | <b>Main Spans:</b> 3  |                          |
| MARTIN WAY                    |                        | 27.09 %g              | C                    | PCB                             | <b>Appr. Spans:</b> 0 |                          |
| <b>Year Built:</b> 1967       | <b>ADT:</b> 60884      | <b>Detour Length:</b> | <b>Skew Angle:</b>   | <b>Pier Type:</b>               | <b>Footing Type:</b>  |                          |
| <b>Year Rebuilt:</b> 1988     | <b>Truck Pct:</b> 10 % | 0 miles               | 50                   | Pier with more than two columns |                       |                          |



**Bridge Notes:**

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four south columns per pier (built in 1967) only. These columns have #4 hoops @12", longitudinal #11 bars have splices at top of footings. Splice lengths are 4'-2". Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 & 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.) 15' deep excavation.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$364,012.00**

**Estimated Total Retrofit Project Cost: \$655,221.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                                      |                       |   |                               |   |                           |   |  |
|--------------------------------------|-----------------------|---|-------------------------------|---|---------------------------|---|--|
| <b>Structure ID:</b> 0008100C        |                       | <b>Bridge Name:</b><br>I-5 OC, CARPENTER RD |                               | <b>Route:</b><br>5                      | <b>Milepost:</b><br>110.4 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 5/339          |                       |   |                               |   |                           | <b>County:</b> Thurston                       |  |
| <b>Location:</b><br>6.2 N JCT US 101 |                       | <b>Longitude:</b><br>122 47 48 "            | <b>Latitude:</b><br>47 3 30 " | <b>Structure Length:</b><br>356 ft.     |                           | <b>Out to Out Width:</b><br>34 ft.            |  |
| <b>Feature Intersected:</b><br>I-5   |                       | <b>PGA:</b><br>27.09 %g                     | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1967              | <b>ADT:</b> 6450      | <b>Detour Length:</b><br>3 miles            | <b>Skew Angle:</b><br>4       | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |  |
| <b>Year Rebuilt:</b>                 | <b>Truck Pct:</b> 2 % |   |                               |   |                           |   |  |



No Photo Available

**Bridge Notes:**

Piers 2, 3 and 4, each has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2, 3 & 4. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

Estimated Total Bridge Item Cost: \$148,318.50

Estimated Total Retrofit Project Cost: \$266,973.30

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                                      |                       |  |                              |   |                            |   |
|--------------------------------------|-----------------------|--|------------------------------|---|----------------------------|---|
| <b>Structure ID:</b> 0008100D        |                       | <b>Bridge Name:</b><br>I-5 OC, MERIDIAN RD |                              | <b>Route:</b><br>5                      | <b>Milepost:</b><br>113.08 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/341          |                       |  |                              |   |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>1.2 N JCT SR 510 |                       | <b>Longitude:</b><br>122 44 24 "           | <b>Latitude:</b><br>47 4 0 " | <b>Structure Length:</b><br>280 ft.     |                            | <b>Out to Out Width:</b><br>30.6 ft.          |
| <b>Feature Intersected:</b><br>I-5   |                       | <b>PGA:</b><br>27.28 %g                    | <b>Seismic Zone:</b><br>C    | <b>Span Type:</b><br>PCB                |                            | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1968              | <b>ADT:</b> 2714      | <b>Detour Length:</b><br>5 miles           | <b>Skew Angle:</b><br>12     | <b>Pier Type:</b><br>Double Column Pier |                            | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                 | <b>Truck Pct:</b> 1 % |  |                              |   |                            |   |



**Bridge Notes:**

Piers 2, 3 and 4, each has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$139,953.00**

**Estimated Total Retrofit Project Cost: \$251,915.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                      |                                |   |                            |   |
|--|------------------------|--------------------------------------|--------------------------------|---|----------------------------|---|
| <b>Structure ID:</b> 0008100E                |                        | <b>Bridge Name:</b><br>MCALLISTER CR |                                | <b>Route:</b><br>5                      | <b>Milepost:</b><br>114.09 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/342E                 |                        |                                      |                                |   |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>2.2 N JCT SR 510         |                        | <b>Longitude:</b><br>122 43 12.3 "   | <b>Latitude:</b><br>47 4 5.5 " | <b>Structure Length:</b><br>272 ft.     |                            | <b>Out to Out Width:</b><br>51.4 ft.          |
| <b>Feature Intersected:</b><br>MCALLISTER CR |                        | <b>PGA:</b><br>27.28 %g              | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1968                      | <b>ADT:</b> 60884      | <b>Detour Length:</b><br>1 miles     | <b>Skew Angle:</b><br>12       | <b>Pier Type:</b><br>Double Column Pier |                            | <b>Footing Type:</b><br>Timber pile           |
| <b>Year Rebuilt:</b>                         | <b>Truck Pct:</b> 10 % |                                      |                                |   |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 & 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 6

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$232,303.50**

**Estimated Total Retrofit Project Cost: \$418,146.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                      |                                 |   |                            |   |
|--|------------------------|--------------------------------------|---------------------------------|---|----------------------------|---|
| <b>Structure ID:</b> 0008100F                |                        | <b>Bridge Name:</b><br>MCALLISTER CR |                                 | <b>Route:</b><br>5                      | <b>Milepost:</b><br>114.09 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/342W                 |                        |                                      |                                 |   |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>2.2 N JCT SR 510         |                        | <b>Longitude:</b><br>122° 13' 12"    | <b>Latitude:</b><br>47° 4' 6.4" | <b>Structure Length:</b><br>272 ft.     |                            | <b>Out to Out Width:</b><br>51.4 ft.          |
| <b>Feature Intersected:</b><br>MCALLISTER CR |                        | <b>PGA:</b><br>27.28 %g              | <b>Seismic Zone:</b><br>C       | <b>Span Type:</b><br>PCB                |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1968                      | <b>ADT:</b> 60884      | <b>Detour Length:</b><br>1 miles     | <b>Skew Angle:</b><br>12        | <b>Pier Type:</b><br>Double Column Pier |                            | <b>Footing Type:</b><br>Timber pile           |
| <b>Year Rebuilt:</b>                         | <b>Truck Pct:</b> 10 % |                                      |                                 |   |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 & 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 6

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$231,874.50**

**Estimated Total Retrofit Project Cost: \$417,374.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                    |                               |   |                            |   |
|--|------------------------|------------------------------------|-------------------------------|---|----------------------------|---|
| <b>Structure ID:</b> 0008116A              |                        | <b>Bridge Name:</b><br>NISQUALLY R |                               | <b>Route:</b><br>5                      | <b>Milepost:</b><br>114.86 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/345W               |                        |                                    |                               |   |                            | <b>County:</b> Thurston                       |
| <b>Location:</b><br>0.1 N THURSTON         |                        | <b>Longitude:</b><br>122 42 12 "   | <b>Latitude:</b><br>47 4 18 " | <b>Structure Length:</b><br>430 ft.     |                            | <b>Out to Out Width:</b><br>51.4 ft.          |
| <b>Feature Intersected:</b><br>NISQUALLY R |                        | <b>PGA:</b><br>27.28 %g            | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>ST PCB             |                            | <b>Main Spans:</b> 1<br><b>Appr. Spans:</b> 2 |
| <b>Year Built:</b> 1967                    | <b>ADT:</b> 45830      | <b>Detour Length:</b><br>1 miles   | <b>Skew Angle:</b><br>0       | <b>Pier Type:</b><br>Double Column Pier |                            | <b>Footing Type:</b><br>Timber pile           |
| <b>Year Rebuilt:</b>                       | <b>Truck Pct:</b> 15 % |                                    |                               |   |                            |   |



**Bridge Notes:**

Piers 2, and 3, each has two 6'-0" diameter columns. #4 hoops @ 12". Weld splices for longitudinal bars (#11 at pier 2, #14 at pier 3). Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 & 3. Truss catcher blocks at Piers 2 & 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 6' dia.). 20 ft. deep excavation.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$387,997.50**

**Estimated Total Retrofit Project Cost: \$698,395.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                                    |                       |   |                                 |   |                           |   |  |
|------------------------------------|-----------------------|---|---------------------------------|---|---------------------------|---|--|
| <b>Structure ID:</b> 0008134D      |                       | <b>Bridge Name:</b><br>I-5 OC, OLD NISQUALLY RD |                                 | <b>Route:</b><br>5                      | <b>Milepost:</b><br>116.7 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 5/406        |                       |   |                                 |   |                           | <b>County:</b> Pierce                         |  |
| <b>Location:</b><br>2.0 N THURSTON |                       | <b>Longitude:</b><br>122 40 12.5 "              | <b>Latitude:</b><br>47 4 58.1 " | <b>Structure Length:</b><br>138 ft.     |                           | <b>Out to Out Width:</b><br>40 ft.            |  |
| <b>Feature Intersected:</b><br>I-5 |                       | <b>PGA:</b><br>27.28 %g                         | <b>Seismic Zone:</b><br>C       | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 2<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1967            | <b>ADT:</b> 1870      | <b>Detour Length:</b><br>6 miles                | <b>Skew Angle:</b><br>0         | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b><br>Timber pile           |  |
| <b>Year Rebuilt:</b>               | <b>Truck Pct:</b> 2 % |   |                                 |   |                           |   |  |



**Bridge Notes:**

Pier 2 has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 2 columns at Pier 2. (3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$45,732.50**

**Estimated Total Retrofit Project Cost: \$82,318.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                       |                                |  |                            |   |
|--|------------------------|---------------------------------------|--------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0008580A              |                        | <b>Bridge Name:</b><br>FT LEWIS RD OC |                                | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>120.87 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/411E               |                        |                                       |                                |  |                            | <b>County:</b> Pierce                         |
| <b>Location:</b><br>6.1 N THURSTON         |                        | <b>Longitude:</b><br>122° 35' 18"     | <b>Latitude:</b><br>47° 6' 17" | <b>Structure Length:</b><br>165 ft.                  |                            | <b>Out to Out Width:</b><br>54.6 ft.          |
| <b>Feature Intersected:</b><br>FT LEWIS RD |                        | <b>PGA:</b><br>27.42 %g               | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                             |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1969                    | <b>ADT:</b> 45830      | <b>Detour Length:</b><br>1 miles      | <b>Skew Angle:</b><br>0        | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b><br>Spread footing        |
| <b>Year Rebuilt:</b>                       | <b>Truck Pct:</b> 15 % |                                       |                                |  |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has four 30"x30" square columns. #4 hoops @ 12", #9 bars with 3'-4" splices. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 30"x30"). 11' excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$331,881.00**

**Estimated Total Retrofit Project Cost: \$597,385.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                       |  |                                |  |                            |   |
|---|-----------------------|--|--------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0008580B                   |                       | <b>Bridge Name:</b><br>NBCD FT LEWIS RD OC |                                | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>120.87 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/411NCD                  |                       |  |                                |  |                            | <b>County:</b> Pierce                         |
| <b>Location:</b><br>6.1 N THURSTON              |                       | <b>Longitude:</b><br>122° 35' 18"          | <b>Latitude:</b><br>47° 6' 16" | <b>Structure Length:</b><br>172 ft.                  |                            | <b>Out to Out Width:</b><br>40.6 ft.          |
| <b>Feature Intersected:</b><br>NBCD FT LEWIS RD |                       | <b>PGA:</b><br>27.42 %g                    | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                             |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1969                         | <b>ADT:</b> 12417     | <b>Detour Length:</b><br>0 miles           | <b>Skew Angle:</b><br>0        | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                            | <b>Truck Pct:</b> 2 % |  |                                |  |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has three 30"x30" square columns, #4 hoops @ 12", #9 bars with 3'-4" splices. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 30"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$247,439.50**

**Estimated Total Retrofit Project Cost: \$445,391.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                       |  |                                |  |                            |   |  |
|---|-----------------------|--|--------------------------------|--|----------------------------|---|--|
| <b>Structure ID:</b> 0004495B                   |                       | <b>Bridge Name:</b><br>SBCD FT LEWIS RD OC |                                | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>120.87 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 5/411SCD                  |                       |  |                                |  |                            | <b>County:</b> Pierce                         |  |
| <b>Location:</b><br>6.1 N THURSTON              |                       | <b>Longitude:</b><br>122° 35' 18"          | <b>Latitude:</b><br>47° 6' 18" | <b>Structure Length:</b><br>157 ft.                  |                            | <b>Out to Out Width:</b><br>36.6 ft.          |  |
| <b>Feature Intersected:</b><br>SBCD FT LEWIS RD |                       | <b>PGA:</b><br>27.42 %g                    | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>CTB                             |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |  |
| <b>Year Built:</b> 1954                         | <b>ADT:</b> 12417     | <b>Detour Length:</b><br>0 miles           | <b>Skew Angle:</b><br>0        | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b>                          |  |
| <b>Year Rebuilt:</b>                            | <b>Truck Pct:</b> 2 % |  |                                |  |                            |   |  |



**Bridge Notes:**

Piers 2 and 3, each has four 25"x30" columns. #3 hoops @ 12", #9 bars with 2'-0" splices. Footings have #6 top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 25"x30"). 10 ft. excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$311,591.50**

**Estimated Total Retrofit Project Cost: \$560,864.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                       |                               |  |                            |   |
|--|------------------------|---------------------------------------|-------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0004495A              |                        | <b>Bridge Name:</b><br>FT LEWIS RD OC |                               | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>120.87 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/411W               |                        |                                       |                               |  |                            | <b>County:</b> Pierce                         |
| <b>Location:</b><br>6.1 N THURSTON         |                        | <b>Longitude:</b><br>122 35 18 "      | <b>Latitude:</b><br>47 6 18 " | <b>Structure Length:</b><br>157 ft.                  |                            | <b>Out to Out Width:</b><br>54 ft.            |
| <b>Feature Intersected:</b><br>FT LEWIS RD |                        | <b>PGA:</b><br>27.42 %g               | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>CTB                             |                            | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1954                    | <b>ADT:</b> 45830      | <b>Detour Length:</b><br>1 miles      | <b>Skew Angle:</b><br>0       | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b> 1969                  | <b>Truck Pct:</b> 15 % |                                       |                               |  |                            |   |



**Bridge Notes:**

Piers 2 and 3, each has six 25"x30" columns. 4 columns each pier near centerline of roadway (built in 1954) have #3 hoops @ 12", #9 bars with 2'-0" splices. Footings have #6 top mat. 2 columns built in 1969 have #4 ties @ 12", #9 bars with 3'-4" splices.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 25"x30") 10' excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$472,098.00**

**Estimated Total Retrofit Project Cost: \$849,776.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                                     |                       |   |                                  |  |                            |   |
|-------------------------------------|-----------------------|---|----------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0005582A       |                       | <b>Bridge Name:</b><br>I-5 OC, BRIDGEPORT WAY |                                  | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>125.86 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/418         |                       |   |                                  |  |                            | <b>County:</b> Pierce                         |
| <b>Location:</b><br>11.1 N THURSTON |                       | <b>Longitude:</b><br>122° 30' 12" W           | <b>Latitude:</b><br>47° 8' 48" N | <b>Structure Length:</b><br>294 ft.                  |                            | <b>Out to Out Width:</b><br>63 ft.            |
| <b>Feature Intersected:</b><br>I-5  |                       | <b>PGA:</b><br>27.46 %g                       | <b>Seismic Zone:</b><br>C        | <b>Span Type:</b><br>CBOX                            |                            | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1958             | <b>ADT:</b> 26890     | <b>Detour Length:</b><br>2 miles              | <b>Skew Angle:</b><br>39         | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b><br>Spread footing        |
| <b>Year Rebuilt:</b>                | <b>Truck Pct:</b> 2 % |   |                                  |  |                            |   |



**Bridge Notes:**

Piers 2, 3 and 4, each has four 3'-0" diameter columns. #4 hoops @ 12". #11 bars with 2'-4" splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 3' dia.) Deep excavation (20.5 ft. avg.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$728,794.00**

**Estimated Total Retrofit Project Cost: \$1,311,829.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                                      |                       |  |                                   |  |                            |   |
|--------------------------------------|-----------------------|--|-----------------------------------|--|----------------------------|---|
| <b>Structure ID:</b> 0005831A        |                       | <b>Bridge Name:</b><br>I-5 OC, S 56TH ST |                                   | <b>Route:</b><br>5                                   | <b>Milepost:</b><br>130.69 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 5/428          |                       |  |                                   |  |                            | <b>County:</b> Pierce                         |
| <b>Location:</b><br>3.2 N JCT SR 512 |                       | <b>Longitude:</b><br>122° 27' 44" "      | <b>Latitude:</b><br>47° 12' 23" " | <b>Structure Length:</b><br>208 ft.                  |                            | <b>Out to Out Width:</b><br>91 ft.            |
| <b>Feature Intersected:</b><br>I-5   |                       | <b>PGA:</b><br>28.17 %g                  | <b>Seismic Zone:</b><br>C         | <b>Span Type:</b><br>CS                              |                            | <b>Main Spans:</b> 4<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1958              | <b>ADT:</b> 12025     | <b>Detour Length:</b><br>2 miles         | <b>Skew Angle:</b><br>6           | <b>Pier Type:</b><br>Pier with more than two columns |                            | <b>Footing Type:</b><br>Concrete Pile         |
| <b>Year Rebuilt:</b>                 | <b>Truck Pct:</b> 2 % |  |                                   |  |                            |   |



**Bridge Notes:**

Piers 2, 3 and 4, each has six 2'-8" diameter columns. #3 hoops @ 12". #10 bars with 2'-2" splices. Footing without top mat. Expansion joint along centerline of bridge.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (6 ea. 18 total, 2'-8" dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$353,611.50**

**Estimated Total Retrofit Project Cost: \$636,500.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |                                       |                                |  |                           |   |
|--|-----------------------|---------------------------------------|--------------------------------|--|---------------------------|---|
| <b>Structure ID:</b> 0003639A              |                       | <b>Bridge Name:</b><br>ROSEDALE RD OC |                                | <b>Route:</b><br>16                                  | <b>Milepost:</b><br>12.76 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 16/130E              |                       |                                       |                                |  |                           | <b>County:</b> Pierce                         |
| <b>Location:</b><br>12.8 N JCT I-5         |                       | <b>Longitude:</b><br>122 35 18 "      | <b>Latitude:</b><br>47 19 24 " | <b>Structure Length:</b><br>163 ft.                  |                           | <b>Out to Out Width:</b><br>36 ft.            |
| <b>Feature Intersected:</b><br>ROSEDALE RD |                       | <b>PGA:</b><br>29.78 %g               | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>CTB                             |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1949                    | <b>ADT:</b> 44000     | <b>Detour Length:</b><br>1 miles      | <b>Skew Angle:</b><br>0        | <b>Pier Type:</b><br>Pier with more than two columns |                           | <b>Footing Type:</b><br>Spread footing        |
| <b>Year Rebuilt:</b>                       | <b>Truck Pct:</b> 8 % |                                       |                                |  |                           |   |



**Bridge Notes:**

Intermediate Piers, piers 2 and 3, each has four 20"x36" columns on combined spread footings. #3 hoops spaced at 12" spacing. Vertical 1" square bars have 3'-4" min. lap splices at top of footings. End Piers 1 and 4, each has four 20"x24" columns on combined spread footings. Hinge at top of piers 1 and 4 columns. Each pier has Horizontal struts.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 20"x36"). 10 ft. excavation. 37 ft. tall columns with horizontal strut.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$407,005.50**

**Estimated Total Retrofit Project Cost: \$732,609.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |                                       |                                |   |                           |   |
|--|-----------------------|---------------------------------------|--------------------------------|---|---------------------------|---|
| <b>Structure ID:</b> 0008694A              |                       | <b>Bridge Name:</b><br>ROSEDALE RD OC |                                | <b>Route:</b><br>16                     | <b>Milepost:</b><br>12.77 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 16/130W              |                       |                                       |                                |   |                           | <b>County:</b> Pierce                         |
| <b>Location:</b><br>12.8 N JCT I-5         |                       | <b>Longitude:</b><br>122 35 18 "      | <b>Latitude:</b><br>47 19 24 " | <b>Structure Length:</b><br>233 ft.     |                           | <b>Out to Out Width:</b><br>41.5 ft.          |
| <b>Feature Intersected:</b><br>ROSEDALE RD |                       | <b>PGA:</b><br>29.78 %g               | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>PCB                |                           | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1970                    | <b>ADT:</b> 44000     | <b>Detour Length:</b><br>1 miles      | <b>Skew Angle:</b><br>28       | <b>Pier Type:</b><br>Double Column Pier |                           | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                       | <b>Truck Pct:</b> 8 % |                                       |                                |   |                           |   |



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" min. lap splices at top of footings. Piers 1 and 4 are stub abutments with laminated elastomeric bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.) Deep Excavation (16 ft.).

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$216,408.50**

**Estimated Total Retrofit Project Cost: \$389,535.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                        |                                       |                               |  |  |   |
|---|------------------------|---------------------------------------|-------------------------------|--|--|---|
| <b>Structure ID:</b> 0003595A                 |                        | <b>Bridge Name:</b><br>W FK HOQUIAM R |                               | <b>Route:</b><br>101                                 | <b>Milepost:</b><br>96.69              | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 101/138                 |                        |                                       |                               |  |  | <b>County:</b> Grays Harbor                   |
| <b>Location:</b><br>9.2 N JCT SR 109          |                        | <b>Longitude:</b><br>123 54 12 "      | <b>Latitude:</b><br>47 5 42 " | <b>Structure Length:</b><br>118 ft.                  |  | <b>Out to Out Width:</b><br>33.8 ft.          |
| <b>Feature Intersected:</b><br>W FK HOQUIAM R |                        | <b>PGA:</b><br>30.25 %g               | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>CTB                             |  | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1949                       | <b>ADT:</b> 2807       | <b>Detour Length:</b><br>32 miles     | <b>Skew Angle:</b><br>0       | <b>Pier Type:</b><br>Pier with more than two columns | <b>Footing Type:</b><br>Spread footing |   |
| <b>Year Rebuilt:</b>                          | <b>Truck Pct:</b> 20 % |                                       |                               |  |  |   |



No Photo Available

**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 20"x33" columns on combined spread footing. 1'-3"x 9'-0" infill walls between columns. Columns have #3 ties spaced at 12" spacing. Vertical #8 bars have 3'-4" lap splices at top of footings. End Pier 1 is a cantilever "L" abutment with four rocker bearings. End pier 4 has four 20"x30" columns.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3 to top of pier wall. (4 ea. 8 total, 20"x33") Install catchers and retainers for rocker bearings at Pier 1.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$144,639.00

Estimated Total Retrofit Project Cost: \$260,350.20

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                   |                               |  |  |   |
|--|------------------------|-----------------------------------|-------------------------------|--|--|---|
| <b>Structure ID:</b> 0003217A            |                        | <b>Bridge Name:</b><br>BIG CREEK  |                               | <b>Route:</b><br>101                                 | <b>Milepost:</b><br>102.61             | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 101/147            |                        |                                   |                               |  |  | <b>County:</b> Grays Harbor                   |
| <b>Location:</b><br>15.1 N JCT SR 109    |                        | <b>Longitude:</b><br>123 53 1 "   | <b>Latitude:</b><br>47 10 6 " | <b>Structure Length:</b><br>156 ft.                  |  | <b>Out to Out Width:</b><br>39 ft.            |
| <b>Feature Intersected:</b><br>BIG CREEK |                        | <b>PGA:</b><br>30.53 %g           | <b>Seismic Zone:</b><br>C     | <b>Span Type:</b><br>CTB                             |  | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 0 |
| <b>Year Built:</b> 1947                  | <b>ADT:</b> 2723       | <b>Detour Length:</b><br>32 miles | <b>Skew Angle:</b><br>0       | <b>Pier Type:</b><br>Pier with more than two columns | <b>Footing Type:</b><br>Spread footing |   |
| <b>Year Rebuilt:</b> 1991                | <b>Truck Pct:</b> 20 % |                                   |                               |  |  |   |



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 20"x36" columns on combined spread footing (built in 1947) and a 20"x36" column on 4'-0" dia. drilled shaft. Four columns built in 1947 have #3 ties spaced at 12" spacing. Vertical 1 1/4" square bars have 4'-2" lap splices at top of footings. End Pier 1 has four 20"x24" columns with hinge at top of columns and conc. pile X-beam with pin connection. Pier 4 is a "L" abutment with four an elastomeric pad bearing on pedestal.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns built in 1947 at piers 2 and 3. (4 ea. 8 total, 20" x 36")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 8

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$238,524.00**

**Estimated Total Retrofit Project Cost: \$429,343.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                               |                        |                       |                      |                                 |                       |                             |
|-------------------------------|------------------------|-----------------------|----------------------|---------------------------------|-----------------------|-----------------------------|
| <b>Structure ID:</b> 0003765A |                        | <b>Bridge Name:</b>   |                      | <b>Route:</b>                   | <b>Milepost:</b>      | <b>Region:</b> Olympic      |
| <b>Bridge Number:</b> 101/149 |                        | HUMPTULIPS OVERFLOW   |                      | 101                             | 108.84                | <b>County:</b> Grays Harbor |
| <b>Location:</b>              |                        | <b>Longitude:</b>     | <b>Latitude:</b>     | <b>Structure Length:</b>        |                       | <b>Out to Out Width:</b>    |
| 21.3 N JCT SR 109             |                        | ° ' "                 | ° ' "                | 156 ft.                         |                       | 34 ft.                      |
| <b>Feature Intersected:</b>   |                        | <b>PGA:</b>           | <b>Seismic Zone:</b> | <b>Span Type:</b>               | <b>Main Spans:</b> 3  |                             |
| HUMPTULIPS OVERFLOW           |                        | 30.15 %g              | C                    | CTB                             | <b>Appr. Spans:</b> 0 |                             |
| <b>Year Built:</b> 1950       | <b>ADT:</b> 3574       | <b>Detour Length:</b> | <b>Skew Angle:</b>   | <b>Pier Type:</b>               | <b>Footing Type:</b>  |                             |
| <b>Year Rebuilt:</b>          | <b>Truck Pct:</b> 20 % | 32 miles              | 0                    | Pier with more than two columns | Spread footing        |                             |



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 20"x36" columns on combined spread footing. Columns have #3 ties spaced at 12" spacing. Vertical 1" square bars have 3'-4" lap splices at top of footings. End piers 1 and 4, each has four 20"x36" columns.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at piers 2 and 3. (4 ea. 8 total). 20" x 36" rectangular columns. 14 ft. excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 8

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$435,638.50**

**Estimated Total Retrofit Project Cost: \$784,149.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|   |                        |                                     |                                |  |                         |   |
|---|------------------------|-------------------------------------|--------------------------------|--|-------------------------|---|
| <b>Structure ID:</b> 0003765B               |                        | <b>Bridge Name:</b><br>HUMPTULIPS R |                                | <b>Route:</b><br>101                                 | <b>Milepost:</b><br>109 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 101/150               |                        |                                     |                                |  |                         | <b>County:</b> Grays Harbor                   |
| <b>Location:</b><br>21.5 N JCT SR 109       |                        | <b>Longitude:</b><br>123 57 42 "    | <b>Latitude:</b><br>47 13 48 " | <b>Structure Length:</b><br>450 ft.                  |                         | <b>Out to Out Width:</b><br>32.5 ft.          |
| <b>Feature Intersected:</b><br>HUMPTULIPS R |                        | <b>PGA:</b><br>30.15 %g             | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>ST SB                           |                         | <b>Main Spans:</b> 1<br><b>Appr. Spans:</b> 3 |
| <b>Year Built:</b> 1950                     | <b>ADT:</b> 3574       | <b>Detour Length:</b><br>32 miles   | <b>Skew Angle:</b><br>0        | <b>Pier Type:</b><br>Pier with more than two columns |                         | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                        | <b>Truck Pct:</b> 20 % |                                     |                                |  |                         |   |



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 20"x36" columns on combined spread footing. Fixed and rocker bearings support the steel beams. Pier 4 is a pier wall. Approach span has 9 girders per span.

**Retrofit Program Notes:**

Steel bridge over water. Isolation bearing may be an option.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at piers 2 and 3. (4 ea. 8 total, 20" x 36"). Install restrainers and catchers for rocker bearings at piers 1 thru 5.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$483,681.00**

**Estimated Total Retrofit Project Cost: \$870,625.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                        |                                    |                                 |   |                            |   |  |
|--|------------------------|------------------------------------|---------------------------------|---|----------------------------|---|--|
| <b>Structure ID:</b> 0001764B              |                        | <b>Bridge Name:</b><br>DUCKABUSH R |                                 | <b>Route:</b><br>101                    | <b>Milepost:</b><br>310.22 | <b>Region:</b> Olympic                        |  |
| <b>Bridge Number:</b> 101/266              |                        |                                    |                                 |   |                            | <b>County:</b> Jefferson                      |  |
| <b>Location:</b><br>25.1 S JCT SR 104      |                        | <b>Longitude:</b><br>122° 56' 0"   | <b>Latitude:</b><br>47° 38' 48" | <b>Structure Length:</b><br>168 ft.     |                            | <b>Out to Out Width:</b><br>24.5 ft.          |  |
| <b>Feature Intersected:</b><br>DUCKABUSH R |                        | <b>PGA:</b><br>30.93 %g            | <b>Seismic Zone:</b><br>C       | <b>Span Type:</b><br>CA CG              |                            | <b>Main Spans:</b> 1<br><b>Appr. Spans:</b> 2 |  |
| <b>Year Built:</b> 1934                    | <b>ADT:</b> 2063       | <b>Detour Length:</b><br>18 miles  | <b>Skew Angle:</b><br>0         | <b>Pier Type:</b><br>Double Column Pier |                            | <b>Footing Type:</b><br>Concrete Pile         |  |
| <b>Year Rebuilt:</b>                       | <b>Truck Pct:</b> 10 % |                                    |                                 |   |                            |   |  |



**Bridge Notes:**

Concrete tie arch bridge. End Piers, 1 and 4, are spill through abutments. Each abutment has two 24"x30" columns on pile footings. Intermediate piers, 2 and 3, each two 4'-6" sq. columns on pile footings with cap beam between columns. 16" tall truss bearings on top of column. (Exp. Bearings at pier 2, fixed bearings at pier 3). 1/2" sq. bar hoops @ 36". Vertical #7 bars full length dowels into footings. Bridge built in 1934, No substructure retrofit recommended.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Install catchers and restrainers at Piers 2 and 3.

**Remaining Retrofit Notes:**

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$63,800.00**

**Estimated Total Retrofit Project Cost: \$114,840.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                               |                       |                       |                      |                                 |                       |                          |
|-------------------------------|-----------------------|-----------------------|----------------------|---------------------------------|-----------------------|--------------------------|
| <b>Structure ID:</b> 0003062A |                       | <b>Bridge Name:</b>   |                      | <b>Route:</b>                   | <b>Milepost:</b>      | <b>Region:</b> Olympic   |
| <b>Bridge Number:</b> 166/24  |                       | SR 166 OC             |                      | 166                             | 3.97                  | <b>County:</b> Kitsap    |
| <b>Location:</b>              |                       | <b>Longitude:</b>     | <b>Latitude:</b>     | <b>Structure Length:</b>        |                       | <b>Out to Out Width:</b> |
| 4.0 E JCT SR 16               |                       | 122 37 30"            | 47 32 0"             | 157 ft.                         |                       | 37.8 ft.                 |
| <b>Feature Intersected:</b>   |                       | <b>PGA:</b>           | <b>Seismic Zone:</b> | <b>Span Type:</b>               | <b>Main Spans:</b> 3  |                          |
| SR 166                        |                       | 33.41 %g              | C                    | CTB                             | <b>Appr. Spans:</b> 0 |                          |
| <b>Year Built:</b> 1945       | <b>ADT:</b> 4515      | <b>Detour Length:</b> | <b>Skew Angle:</b>   | <b>Pier Type:</b>               | <b>Footing Type:</b>  |                          |
| <b>Year Rebuilt:</b>          | <b>Truck Pct:</b> 5 % | 1 miles               | 0                    | Pier with more than two columns |                       |                          |



**Bridge Notes:**

End piers, 1 and 4, are "L" abutments. Each abutment has four 1' 2 1/4" tall rocker bearings. Piers 2 and 3, each has four 20"x36" columns on combined spread footings with horizontal struts between columns.. These columns have #3 hoops @ 12". Vertical 1 1/4" sq. bars have 4'-2" lap splices at top of footings. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 20"x36") Install catcher blocks and restrainers.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$342,512.50**

**Estimated Total Retrofit Project Cost: \$616,522.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|                               |                       |                        |                      |                          |                        |                          |
|-------------------------------|-----------------------|------------------------|----------------------|--------------------------|------------------------|--------------------------|
| <b>Structure ID:</b> 0005565A |                       | <b>Bridge Name:</b>    |                      | <b>Route:</b>            | <b>Milepost:</b>       | <b>Region:</b> Olympic   |
| <b>Bridge Number:</b> 303/12  |                       | PORT WASHINGTON CS1840 |                      | 303                      | 0.73                   | <b>County:</b> Kitsap    |
| <b>Location:</b>              |                       | <b>Longitude:</b>      | <b>Latitude:</b>     | <b>Structure Length:</b> |                        | <b>Out to Out Width:</b> |
| 0.7 N JCT SR 304              |                       | 122 37 57.7"           | 47 34 41.3"          | 1717 ft.                 |                        | 66.5 ft.                 |
| <b>Feature Intersected:</b>   |                       | <b>PGA:</b>            | <b>Seismic Zone:</b> | <b>Span Type:</b>        | <b>Main Spans:</b> 3   |                          |
| PORT WASHINGTON NARROWS       |                       | 33.92 %g               | C                    | SG CBOX CTB              | <b>Appr. Spans:</b> 12 |                          |
| <b>Year Built:</b> 1958       | <b>ADT:</b> 31971     | <b>Detour Length:</b>  | <b>Skew Angle:</b>   | <b>Pier Type:</b>        | <b>Footing Type:</b>   |                          |
| <b>Year Rebuilt:</b>          | <b>Truck Pct:</b> 2 % | 3 miles                | 0                    | Double Column Pier       | Spread footing         |                          |



**Bridge Notes:**

Pier 1 is a cantilever "L" abutment. Piers 2 thru 11, each has two columns. Piers 12 thru 15, each has three columns. Full height split at pier 13. Pier 16 is a spill through abutment. Haunch steel girders pier 5 thru 8. Rocker expansion bearings at piers 5 and 8. Conc. Box girders piers 2 thru 5 and Piers 8 thru 11.

**Retrofit Program Notes:**

Steel Jacketing for columns submerged in deep water is not technically and economically feasible. Need to evaluate retrofit schemes (May consider base isolation).

**Completed Retrofit Notes:**

Longitudianl Rod Restrainers, Transv. Pipe Restrainers, Conc. restrainers, steel brackets, concrete stops at Piers 1, 2, 5 thru 8, 11, 13 & 16. (Seismic Retrofit and bearing rehab.)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 12-15 (3 ea. 12 total, 43.25"x43.25"). Piers 2, 3, 4, 5, 6, 7, 8 and 9 are in deep water. Column jackets are too expansive to install. Replace bearings with isolation bearings.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** P

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 18

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$3,257,122.00**

**Estimated Total Retrofit Project Cost: \$5,862,819.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

|  |                       |                                   |                                |                                      |                          |   |
|--|-----------------------|-----------------------------------|--------------------------------|--------------------------------------|--------------------------|---|
| <b>Structure ID:</b> 0003573A                |                       | <b>Bridge Name:</b><br>AGATE PASS |                                | <b>Route:</b><br>305                 | <b>Milepost:</b><br>6.82 | <b>Region:</b> Olympic                        |
| <b>Bridge Number:</b> 305/10                 |                       |                                   |                                |                                      |                          | <b>County:</b> Kitsap                         |
| <b>Location:</b><br>6.8 N BAINBRIDG          |                       | <b>Longitude:</b><br>122 34 0 "   | <b>Latitude:</b><br>47 42 48 " | <b>Structure Length:</b><br>1229 ft. |                          | <b>Out to Out Width:</b><br>34 ft.            |
| <b>Feature Intersected:</b><br>AGATE PASSAGE |                       | <b>PGA:</b><br>32.49 %g           | <b>Seismic Zone:</b><br>C      | <b>Span Type:</b><br>ST CTB          |                          | <b>Main Spans:</b> 3<br><b>Appr. Spans:</b> 4 |
| <b>Year Built:</b> 1950                      | <b>ADT:</b> 16281     | <b>Detour Length:</b><br>99 miles | <b>Skew Angle:</b><br>0        | <b>Pier Type:</b><br>Pier Wall       |                          | <b>Footing Type:</b>                          |
| <b>Year Rebuilt:</b>                         | <b>Truck Pct:</b> 5 % |                                   |                                |                                      |                          |   |



No Photo Available

**Bridge Notes:**

Piers 2 and 7, each has four 20"x42" columns on combined spread footings with horizontal struts. Pier 8 has four 20"x36" columns on combined spread footings with horizontal struts. All columns have #3 ties @ 12". Vertical bars have lap splices at top of footing. Piers 5 thru 6 are pier walls or two columns with infill walls.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit four 20"x42" rectangular columns at piers 2 and 7. (8 total).

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$385,456.50

Estimated Total Retrofit Project Cost: \$693,821.70