

## **Appendix C - List of Element-Level Costs of Maintenance Actions**

This section lists element-level unit costs of maintenance actions computed for DOTs of California, Michigan, Oregon and Tennessee. Costs are median unit costs. Lists are in order of element number. The condition states before and after maintenance are indicated by costs' positions in matrices. Maintenance operations are listed next to unit costs.

Table A3- 1 Michigan Element-Level Unit Costs

| 12 Concrete Deck- Black Bars<br>/ square meter |   | Condition After                  |                 |                 |
|--|---|----------------------------------|-----------------|-----------------|
|  |   | 1                                | 2               | 3               |
| Condition Before                               | 1 |                                  |                 |                 |
|  | 2 | \$ 11.41 Coat<br>\$ 12.81 Repair |                 |                 |
|  | 3 | \$ 8.51 Coat<br>\$ 19.15 Repair  | \$ 6.94 Repair  |                 |
|  | 4 |                                  | \$ 18.85 Repair | \$ 52.15 Repair |
|  | 5 | \$ 67.08 Repair                  |                 |                 |

| 13 Concrete Deck With HMA Overlay- No Membrane<br>/ square meter |   | Condition After                   |   |   |
|--|---|-----------------------------------|---|---|
|  |   | 1                                 | 2 | 3 |
| Condition Before   | 1 |                                   |   |   |
|  | 2 |                                   |   |   |
|  | 3 |                                   |   |   |
|  | 4 | \$ 25.60 Repair                   |   |   |
|  | 5 | \$ 153 Repair<br>\$ 80.64 Replace |   |   |

| 22 Concrete Deck With Rigid Overlay<br>/ square meter |   | Condition After                    |                 |   |
|---|---|------------------------------------|-----------------|---|
|   |   | 1                                  | 2               | 3 |
| Condition Before                                      | 1 |                                    |                 |   |
|   | 2 | \$ 30.08 Repair<br>\$ 84.84 Modify |                 |   |
|   | 3 | \$ 49.72 Coat<br>\$ 35.44 Repair   | \$ 13.21 Repair |   |
|   | 4 | \$ 19.41 Repair<br>\$ 56.89 Modify | \$ 17.03 Repair |   |
|   | 5 | \$ 14.07 Repair                    | \$ 14.58 Repair |   |

| 26 Concrete Deck With Coated Bars<br>/ square meter |   | Condition After                   |   |   |
|---|---|-----------------------------------|---|---|
|   |   | 1                                 | 2 | 3 |
| Condition Before                                    | 1 |                                   |   |   |
|   | 2 | \$ 10.79 Repair<br>\$ 154 Replace |   |   |
|   | 3 | \$ 145 Repair                     |   |   |
|   | 4 |                                   |   |   |
|   | 5 |                                   |   |   |

| 106 Unpainted Steel Girder or Beam<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                              | 1 |                 |   |   |
|   | 2 | \$ 79.38 Repair |   |   |
|   | 3 | \$ 178 Repair   |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 107 Painted Steel Girder or Beam<br>/ meter |   | Condition After                                    |                 |  |
|---|---|--|-----------------|--|
|   |   | 1  | 2               | 3  |
| Condition Before                            | 1 |  |                 |  |
|   | 2 | \$ 51.17 Coat<br>\$ 63.98 Repair<br>\$ 150 Replace |                 |  |
|   | 3 | \$ 14.24 Coat<br>\$ 47.62 Repair                   | \$ 34.98 Repair |  |
|   | 4 | \$ 131 Repair                                      |                 | \$ 9,660 Coat<br>\$ 18.06 Repair<br>\$ 10,459,239<br>Modify<br>\$ 309,166<br>Replace |
|   | 5 | \$ 152 Repair                                      |                 |  |

| 109 Prestressed Concrete Girder or Beam<br>/ meter |   | Condition After      |                 |   |
|--|---|----------------------|-----------------|---|
|  |   | 1                    | 2               | 3 |
| Condition Before                                   | 1 |                      |                 |   |
|  | 2 | \$ 550 Repair        |                 |   |
|  | 3 | \$ 771,021<br>Repair | \$ 1,286 Repair |   |
|  | 4 |                      |                 |   |
|  | 5 |                      |                 |   |

| 110 Reinforced Concrete Girder or Beam<br>/ meter |   | Condition After                   |  |   |
|---|---|-----------------------------------|--|---|
|   |   | 1                                 | 2                                      | 3 |
| Condition Before                                  | 1 |                                   |  |   |
|   | 2 | \$ 39.90 Repair<br>\$ 489 Replace |  |   |
|   | 3 | \$ 37.79 Repair                   | \$ 133 Repair<br>\$ 401,771<br>Replace |   |
|   | 4 |                                   |  |   |
|   | 5 |                                   |  |   |

| 113 Painted Steel Stringer<br>/ meter |   | Condition After |                 |   |
|---------------------------------------|---|-----------------|-----------------|---|
|                                       |   | 1               | 2               | 3 |
| Condition Before                      | 1 |                 |                 |   |
|                                       | 2 | \$ 717 Repair   |                 |   |
|                                       | 3 | \$ 33.10 Repair | \$ 46.74 Repair |   |
|                                       | 4 |                 |                 |   |
|                                       | 5 |                 |                 |   |

| 152 Painted Steel Floor Beam<br>/ meter |   | Condition After |   |               |
|---|---|-----------------|---|---------------|
|   |   | 1               | 2 | 3             |
| Condition Before                        | 1 |                 |   |               |
|   | 2 |                 |   |               |
|   | 3 |                 |   |               |
|   | 4 |                 |   | \$ 309 Repair |
|   | 5 |                 |   |               |

| 160 Unpainted Pin and Hanger Assembly<br>/ each |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                                | 1 |                 |   |   |
|   | 2 | \$ 3,583 Repair |   |   |
|   | 3 | \$ 1,836 Repair |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 161 Painted Steel Pin and Hanger Assembly<br>/ each |   | Condition After                  |               |   |
|---|---|----------------------------------|---------------|---|
|   |   | 1                                | 2             | 3 |
| Condition Before                                    | 1 |                                  |               |   |
|   | 2 | \$ 57.56 Coat \$<br>1,318 Repair |               |   |
|   | 3 | \$ 1,743 Repair                  | \$ 381 Repair |   |
|   | 4 | \$ 1,548 Repair                  |               |   |
|   | 5 |                                  |               |   |

| 202 Painted Steel Column or Pile Extension<br>/ each |   | Condition After |   |                 |
|--|---|-----------------|---|-----------------|
|  |   | 1               | 2 | 3               |
| Condition Before                                     | 1 |                 |   |                 |
|  | 2 | \$ 761 Repair   |   |                 |
|  | 3 | \$ 922 Repair   |   |                 |
|  | 4 |                 |   | \$ 1,250 Repair |
|  | 5 |                 |   |                 |

| 205 Reinforced Concrete Column or Pile Extension / each |   | Condition After                                       |                                     |   |
|---|---|---|-------------------------------------|---|
|   |   | 1   | 2                                   | 3 |
| Condition Before  | 1 |   |                                     |   |
|   | 2 | \$ 76.75 Coat<br>\$ 4,135 Repair<br>\$ 45,416 Replace |                                     |   |
|   | 3 | \$ 6,601 Repair                                       | \$ 1,818 Repair<br>\$ 7,272 Replace |   |
|   | 4 |   |                                     |   |
|   | 5 |   |                                     |   |

| 210 Reinforced Concrete Pier Wall / meter |   | Condition After |               |   |
|---|---|-----------------|---------------|---|
|   |   | 1               | 2             | 3 |
| Condition Before                          | 1 |                 |               |   |
|   | 2 | \$ 3,669 Repair |               |   |
|   | 3 | \$ 1,659 Repair | \$ 267 Repair |   |
|   | 4 |                 |               |   |
|   | 5 |                 |               |   |

| 215 Reinforced Conc Abutment / meter |   | Condition After   |                                       |   |
|--------------------------------------|---|---|---------------------------------------|---|
|                                      |   | 1   | 2                                     | 3 |
| Condition Before                     | 1 |   |                                       |   |
|                                      | 2 | \$ 1,090 Coat<br>\$ 4,404 Repair<br>\$ 4,322 Modify<br>\$ 2,648 Replace |                                       |   |
|                                      | 3 | \$ 1,948 Repair   | \$ 2,395 Repair<br>\$ 528,490 Replace |   |
|                                      | 4 |   | \$ 4,783 Repair                       |   |
|                                      | 5 |   |                                       |   |

| 231 Painted Steel Pier Cap / meter |   | Condition After |   |   |
|------------------------------------|---|-----------------|---|---|
|                                    |   | 1               | 2 | 3 |
| Condition Before                   | 1 |                 |   |   |
|                                    | 2 | \$ 3,791 Repair |   |   |
|                                    | 3 |                 |   |   |
|                                    | 4 | \$ 369 Repair   |   |   |
|                                    | 5 |                 |   |   |

| 234 Reinforced Concrete Pier Cap<br>/ meter |   | Condition After  |  |   |
|---|---|--|--|---|
|   |   | 1  | 2                                      | 3 |
| Condition Before                            | 1 |  |  |   |
|   | 2 | \$ 494 Coat<br>\$ 1,615 Repair<br>\$ 4,894 Modify<br>\$ 2,197<br>Replace |  |   |
|   | 3 | \$ 604 Coat<br>\$ 4,024 Repair   | \$ 4,298 Repair<br>\$ 2,945<br>Replace |   |
|   | 4 | \$ 11,444<br>Repair  |  |   |
|   | 5 |  |  |   |

| 241 Reinforced Concrete Culvert<br>/ meter |   | Condition After      |   |   |
|--|---|----------------------|---|---|
|  |   | 1                    | 2 | 3 |
| Condition Before                           | 1 |                      |   |   |
|  | 2 | \$ 74,803<br>Replace |   |   |
|  | 3 | \$ 25,785<br>Replace |   |   |
|  | 4 |                      |   |   |
|  | 5 |                      |   |   |

| 310 Elastomeric Bearing<br>/ each |   | Condition After |   |   |
|-----------------------------------|---|-----------------|---|---|
|                                   |   | 1               | 2 | 3 |
| Condition Before                  | 1 |                 |   |   |
|                                   | 2 | \$ 500 Repair   |   |   |
|                                   | 3 |                 |   |   |
|                                   | 4 |                 |   |   |
|                                   | 5 |                 |   |   |

| 311 Movable Bearing (roller, sliding, etc.)<br>/ each |   | Condition After                                       |                 |   |
|---|---|---|-----------------|---|
|   |   | 1   | 2               | 3 |
| Condition Before                                      | 1 |   |                 |   |
|   | 2 | \$ 346 Coat<br>\$ 1,105 Repair<br>\$ 1,730<br>Replace |                 |   |
|   | 3 | \$ 4,250 Repair                                       | \$ 1,359 Repair |   |
|   | 4 |   |                 |   |
|   | 5 |   |                 |   |



| 313 Fixed Bearing<br>/ each |   | Condition After                                       |   |   |
|-----------------------------|---|---|---|---|
|                             |   | 1   | 2 | 3 |
| Condition Before            | 1 |   |   |   |
|                             | 2 | \$ 317 Coat<br>\$ 1,270 Repair<br>\$ 2,922<br>Replace |   |   |
|                             | 3 | \$ 4,862 Repair                                       |   |   |
|                             | 4 |   |   |   |
|                             | 5 |   |   |   |

| 321 Reinforced Concrete Approach Slab<br>/ each |   | Condition After                            |                     |   |
|---|---|--|---------------------|---|
|   |   | 1  | 2                   | 3 |
| Condition Before                                | 1 |  |                     |   |
|   | 2 | \$ 11,388<br>Repair<br>\$ 35,887<br>Modify |                     |   |
|   | 3 | \$ 2,963 Coat<br>\$ 19,387<br>Repair       | \$ 25,555<br>Repair |   |
|   | 4 | \$ 41,527<br>Replace                       |                     |   |
|   | 5 |  |                     |   |

| 330 Uncoated Metal Bridge Railing<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                             | 1 |                 |   |   |
|  | 2 | \$ 96.92 Repair |   |   |
|  | 3 | \$ 865 Replace  |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 331 Reinforced Concrete Bridge Railing<br>/ meter |   | Condition After   |                                      |   |
|---|---|---|--------------------------------------|---|
|   |   | 1   | 2                                    | 3 |
| Condition Before                                  | 1 |   |                                      |   |
|   | 2 | \$ 56.34 Coat<br>\$ 729 Repair<br>\$ 385 Modify<br>\$ 40,940<br>Replace |                                      |   |
|   | 3 | \$ 733 Repair   | \$ 1,298 Coat<br>\$ 44,341<br>Repair |   |



|  |   |  |  |  |
|--|---|--|--|--|
|  | 4 |  |  |  |
|  | 5 |  |  |  |

| 333 Miscellaneous Bridge Railing<br>/ meter |   | Condition After                      |  |   |
|---|---|--------------------------------------|--|---|
|   |   | 1                                    | 2  | 3 |
| Condition Before                            | 1 |                                      |  |   |
|   | 2 | \$ 362 Repair<br>\$ 2,501<br>Replace |  |   |
|   | 3 |                                      | \$ 399 Repair<br>\$ 40,093,750<br>Modify |   |
|   | 4 |                                      |  |   |
|   | 5 |                                      |  |   |

| 357 Pack Rust<br>/ each |   | Condition After |          |   |
|-------------------------|---|-----------------|----------|---|
|                         |   | 1               | 2        | 3 |
| Condition Before        | 1 |                 |          |   |
|                         | 2 | \$ 25,500       |          |   |
|                         | 3 | \$ 8,714        | \$ 6,750 |   |
|                         | 4 |                 |          |   |
|                         | 5 |                 |          |   |

| 358 Deck Cracking Smart Flag - Concrete and<br>Latex Only<br>/ each |   | Condition After                             |                     |   |
|---|---|---|---------------------|---|
|   |   | 1   | 2                   | 3 |
| Condition Before  | 1 |   |                     |   |
|   | 2 | \$ 3,545 Coat<br>\$ 22,500<br>Repair        |                     |   |
|   | 3 | \$ 10,780<br>Repair<br>\$ 39,656<br>Replace | \$ 19,387<br>Repair |   |
|   | 4 |   |                     |   |
|   | 5 |   |                     |   |

| 359 Deck Bottom Surface Smart Flag<br>/ each |   | Condition After                             |                     |  |                     |
|--|---|---|---------------------|--|---------------------|
|  |   | 1   | 2                   | 3  |                     |
| Condition Before                             | 1 |   |                     |  |                     |
|  | 2 | \$ 10,040<br>Repair<br>\$ 62,250<br>Replace |                     |  |                     |
|  | 3 | \$ 43,875<br>Repair                         | \$ 10,294<br>Repair |  |                     |
|  | 4 | \$ 40,294<br>Repair                         | \$ 21,750<br>Repair | \$ 25,570<br>Repair<br>\$ 38,041<br>Modify |                     |
|  | 5 | \$ 39,656<br>Replace                        |                     | \$ 3,400 Coat                              | \$ 21,428<br>Repair |

| 360 Settlement Smart Flag<br>/ each |   | Condition After     |   |   |
|-------------------------------------|---|---------------------|---|---|
|                                     |   | 1                   | 2 | 3 |
| Condition Before                    | 1 |                     |   |   |
|                                     | 2 |                     |   |   |
|                                     | 3 | \$ 91,846<br>Repair |   |   |
|                                     | 4 |                     |   |   |
|                                     | 5 |                     |   |   |

| 362 Traffic Impact Smart Flag<br>/ each |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                        | 1 |                 |   |   |
|   | 2 | \$ 9,722 Repair |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 363 Section Loss Smart Flag<br>/ each |   | Condition After                    |                 |   |
|---------------------------------------|---|------------------------------------|-----------------|---|
|                                       |   | 1                                  | 2               | 3 |
| Condition Before                      | 1 |                                    |                 |   |
|                                       | 2 | \$ 22,500<br>Repair                |                 |   |
|                                       | 3 | \$ 924 Coat<br>\$ 14,500<br>Repair | \$ 8,714 Repair |   |
|                                       | 4 | \$ 7,631 Coat                      |                 |   |
|                                       | 5 |                                    |                 |   |

| 364 Frozen or Deformed Pin and Hanger<br>Smart Flag<br>/ each |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 | \$ 91,846       |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 378 False Decking Smart Flag<br>/ each |   | Condition After     |   |   |
|--|---|---------------------|---|---|
|  |   | 1                   | 2 | 3 |
| Condition Before                       | 1 |                     |   |   |
|  | 2 | \$ 80,625<br>Repair |   |   |
|  | 3 | \$ 23,466<br>Repair |   |   |
|  | 4 |                     |   |   |
|  | 5 |                     |   |   |

| 379 Deck Fascia Smart Flag<br>/ each |   | Condition After  |                     |   |
|--------------------------------------|---|--|---------------------|---|
|                                      |   | 1  | 2                   | 3 |
| Condition Before                     | 1 |  |                     |   |
|                                      | 2 | \$ 5,232 Coat<br>\$ 16,000<br>Repair<br>\$ 39,656<br>Replace |                     |   |
|                                      | 3 | \$ 924 Coat<br>\$ 43,875<br>Repair                           | \$ 14,500<br>Repair |   |
|                                      | 4 |  |                     |   |
|                                      | 5 |  |                     |   |

| 380 Beam Ends in Contact Smart Flag<br>/ each |   | Condition After     |                     |   |
|---|---|---------------------|---------------------|---|
|   |   | 1                   | 2                   | 3 |
| Condition Before                              | 1 |                     |                     |   |
|   | 2 | \$ 13,977<br>Repair |                     |   |
|   | 3 | \$ 16,818<br>Repair | \$ 14,538<br>Repair |   |
|   | 4 |                     |                     |   |
|   | 5 |                     |                     |   |

| 400 Strip Seal Expansion Joint<br>/ meter |   | Condition After                                  |   |   |
|---|---|--|---|---|
|   |   | 1  | 2 | 3 |
| Condition Before                          | 1 |  |   |   |
|   | 2 | \$ 36.23 Coat<br>\$ 290 Repair<br>\$ 491 Replace |   |   |
|   | 3 | \$ 1,234 Repair<br>\$ 425 Replace                |   |   |
|   | 4 |  |   |   |
|   | 5 |  |   |   |

| 401 Pourable Joint Seal<br>/ meter |   | Condition After                                  |  |   |
|------------------------------------|---|--|--|---|
|                                    |   | 1  | 2  | 3 |
| Condition Before                   | 1 |  |  |   |
|                                    | 2 | \$ 148 Coat<br>\$ 777 Repair<br>\$ 543 Replace   |  |   |
|                                    | 3 | \$ 18.01 Coat<br>\$ 511 Repair<br>\$ 885 Replace | \$ 25.01 Coat<br>\$ 275 Repair<br>\$ 651 Replace |   |
|                                    | 4 |  |  |   |
|                                    | 5 |  |  |   |

| 402 Compression Joint Seal<br>/ meter |   | Condition After                   |   |   |
|---------------------------------------|---|-----------------------------------|---|---|
|                                       |   | 1                                 | 2 | 3 |
| Condition Before                      | 1 |                                   |   |   |
|                                       | 2 | \$ 1,078 Repair<br>\$ 562 Replace |   |   |
|                                       | 3 | \$ 928 Repair<br>\$ 517 Replace   |   |   |
|                                       | 4 |                                   |   |   |
|                                       | 5 |                                   |   |   |

| 403 Assembly Joint/Seal (modular)<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                             | 1 |                 |   |   |
|  | 2 | \$ 2,461 Repair |   |   |
|  | 3 | \$ 2,699 Repair |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 404 Steel Armor Expansion Joint (Open)<br>/ meter |   | Condition After                      |   |   |
|---|---|--------------------------------------|---|---|
|   |   | 1                                    | 2 | 3 |
| Condition Before                                  | 1 |                                      |   |   |
|   | 2 | \$ 3,109 Repair                      |   |   |
|   | 3 | \$ 826 Repair<br>\$ 2,112<br>Replace |   |   |
|   | 4 |                                      |   |   |
|   | 5 |                                      |   |   |

| 405 Miscellaneous Expansion Joint<br>/ meter |   | Condition After                 |               |   |
|--|---|---------------------------------|---------------|---|
|  |   | 1                               | 2             | 3 |
| Condition Before                             | 1 |                                 |               |   |
|  | 2 |                                 |               |   |
|  | 3 | \$ 837 Repair<br>\$ 643 Replace | \$ 309 Repair |   |
|  | 4 |                                 |               |   |
|  | 5 |                                 |               |   |

| 410 Polymer Blockout Expansion Joint<br>/ meter |   | Condition After |                 |   |
|---|---|-----------------|-----------------|---|
|   |   | 1               | 2               | 3 |
| Condition Before                                | 1 |                 |                 |   |
|   | 2 |                 |                 |   |
|   | 3 |                 | \$ 89.51 Repair |   |
|   | 4 |                 |                 |   |
|   | 5 |                 |                 |   |

| 411 Block Out Expansion Joint / meter |   | Condition After |   |   |
|---------------------------------------|---|-----------------|---|---|
|                                       |   | 1               | 2 | 3 |
| Condition Before                      | 1 |                 |   |   |
|                                       | 2 | \$ 1,696 Repair |   |   |
|                                       | 3 | \$ 625 Repair   |   |   |
|                                       | 4 |                 |   |   |
|                                       | 5 |                 |   |   |

Table A3- 2 California Element-Level Unit Costs

| 12 Concrete Deck - Bare<br>/ square meter |   | Condition After                                |                |   |
|---|---|--|----------------|---|
|   |   | 1  | 2              | 3 |
| Condition Before                          | 1 |  |                |   |
|   | 2 | \$ 0.30 Maint<br>\$ 106 Coat<br>\$ 1.70 Repair |                |   |
|   | 3 |  | \$ 1.20 Repair |   |
|   | 4 |  | \$ 0.82 Repair |   |
|   | 5 |  |                |   |

| 13 Concrete Deck - Unprotected w/ AC<br>Overlay<br>/ square meter |   | Condition After |                |   |
|---|---|-----------------|----------------|---|
|   |   | 1               | 2              | 3 |
| Condition Before  | 1 |                 |                |   |
|   | 2 |                 |                |   |
|   | 3 |                 | \$ 0.57 Repair |   |
|   | 4 |                 | \$ 1.47 Coat   |   |
|   | 5 |                 |                |   |

| 28 Steel Deck - Open Grid<br>/ square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                            | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 |                 |   |   |
|   | 4 | \$ 23.14 Repair |   |   |
|   | 5 |                 |   |   |

| 30 Steel Deck - Corrugated/Orthotropic/Etc.<br>/ square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 104 Coat     |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 38 Concrete Slab - Bare<br>/ square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                          | 1 |                 |   |   |
|   | 2 | \$ 38.06 Repair |   |   |
|   | 3 |                 |   |   |
|   | 4 | \$ 4.26 Repair  |   |   |
|   | 5 |                 |   |   |



| 39 Concrete Slab - Unprotected w/ AC Overlay / square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 |                 |   |   |
|   | 4 | \$ 0.93 Repair  |   |   |
|   | 5 |                 |   |   |

| 105 Reinforced Concrete Closed Webs/Box Girder / meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                                       | 1 |                 |   |   |
|  | 2 | \$ 1,691 Repair |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 107 Painted Steel Open Girder/Beam / meter |   | Condition After                |   |   |
|--|---|--------------------------------|---|---|
|  |   | 1                              | 2 | 3 |
| Condition Before                           | 1 |                                |   |   |
|  | 2 | \$ 1.63 Maint<br>\$ 44.28 Coat |   |   |
|  | 3 | \$ 10.01 Coat                  |   |   |
|  | 4 |                                |   |   |
|  | 5 |                                |   |   |

| 109 P/S Conc Open Girder/Beam / meter |   | Condition After |   |                 |
|---------------------------------------|---|-----------------|---|-----------------|
|                                       |   | 1               | 2 | 3               |
| Condition Before                      | 1 |                 |   |                 |
|                                       | 2 |                 |   |                 |
|                                       | 3 | \$ 62.95 Repair |   |                 |
|                                       | 4 |                 |   | \$ 610.67 Maint |
|                                       | 5 |                 |   |                 |

| 110 Reinforced Conc Open Girder/Beam / meter |   | Condition After |                 |   |
|--|---|-----------------|-----------------|---|
|  |   | 1               | 2               | 3 |
| Condition Before                             | 1 |                 |                 |   |
|  | 2 | \$ 2,206 Repair |                 |   |
|  | 3 |                 | \$ 2,502 Repair |   |
|  | 4 |                 |                 |   |
|  | 5 |                 |                 |   |



| 113 Painted Steel Stringer<br>/ meter |   | Condition After |   |   |
|---------------------------------------|---|-----------------|---|---|
|                                       |   | 1               | 2 | 3 |
| Condition Before                      | 1 |                 |   |   |
|                                       | 2 |                 |   |   |
|                                       | 3 |                 |   |   |
|                                       | 4 | \$ 17.46 Maint  |   |   |
|                                       | 5 |                 |   |   |

| 121 Painted Steel Bottom Chord Thru Truss<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                                     | 1 |                 |   |   |
|  | 2 | \$ 141 Coat     |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 126 Painted Steel Thru Truss (excl. bottom<br>chord)<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 141 Coat     |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 131 Painted Steel Deck Truss<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                        | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 |                 |   |   |
|   | 4 | \$ 9.30 Maint   |   |   |
|   | 5 |                 |   |   |

| 146 Cable - Uncoated (not embedded in<br>concrete)<br>/ each |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 |                 |   |   |
|  | 3 | \$ 2.17 Maint   |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 152 Painted Steel Floor Beam<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                        | 1 |                 |   |   |
|   | 2 | \$ 441 Coat     |   |   |
|   | 3 |                 |   |   |
|   | 4 | \$ 17.46 Maint  |   |   |
|   | 5 |                 |   |   |

| 161 Painted Steel Pin and/or Pin and Hanger<br>Assembly<br>/ each |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 4,764 Coat   |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 | \$ 213 Maint    |   |   |

| 202 Painted Steel Column or Pile Extension<br>/ each |   | Condition After |               |   |
|--|---|-----------------|---------------|---|
|  |   | 1               | 2             | 3 |
| Condition Before                                     | 1 |                 |               |   |
|  | 2 | \$ 10.03 Coat   |               |   |
|  | 3 |                 |               |   |
|  | 4 |                 | \$ 5,230 Coat |   |
|  | 5 |                 |               |   |

| 205 Reinforced Conc Column or Pile<br>Extension<br>/ each |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 42.88 Maint  |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 215 Reinforced Conc Abutment<br>/ meter |   | Condition After                        |   |   |
|---|---|--|---|---|
|   |   | 1                                      | 2 | 3 |
| Condition Before                        | 1 |  |   |   |
|   | 2 | \$ 136 Maint                           |   |   |
|   | 3 | \$ 3,691 Repair<br>\$ 10,833<br>Modify |   |   |
|   | 4 |  |   |   |
|   | 5 |  |   |   |

| 217 Other Material Abutment<br>/ meter |   | Condition After                 |   |   |
|--|---|---------------------------------|---|---|
|  |   | 1                               | 2 | 3 |
| Condition Before                       | 1 |                                 |   |   |
|  | 2 | \$ 246 Maint<br>\$ 2,232 Modify |   |   |
|  | 3 |                                 |   |   |
|  | 4 |                                 |   |   |
|  | 5 |                                 |   |   |

| 231 Painted Steel Cap<br>/ meter |   | Condition After |               |   |
|----------------------------------|---|-----------------|---------------|---|
|                                  |   | 1               | 2             | 3 |
| Condition Before                 | 1 |                 |               |   |
|                                  | 2 | \$ 1.34 Coat    |               |   |
|                                  | 3 | \$ 18.38 Maint  |               |   |
|                                  | 4 |                 | \$ 1,426 Coat |   |
|                                  | 5 |                 |               |   |

| 301 Pourable Joint Seal<br>/ meter |   | Condition After   |   |   |
|------------------------------------|---|---|---|---|
|                                    |   | 1   | 2 | 3 |
| Condition Before                   | 1 |   |   |   |
|                                    | 2 | \$ 37.37 Repair<br>\$ 78.07<br>Replace                              |   |   |
|                                    | 3 | \$ 5.16 Maint<br>\$ 1,982 Coat<br>\$ 68.79 Repair<br>\$ 146 Replace |   |   |
|                                    | 4 |   |   |   |
|                                    | 5 |   |   |   |

| 302 Compression Joint Seal<br>/ meter |   | Condition After                |   |   |
|---------------------------------------|---|--------------------------------|---|---|
|                                       |   | 1                              | 2 | 3 |
| Condition Before                      | 1 |                                |   |   |
|                                       | 2 | \$ 473 Coat<br>\$ 11.52 Repair |   |   |
|                                       | 3 | \$ 21.52 Maint                 |   |   |
|                                       | 4 |                                |   |   |
|                                       | 5 |                                |   |   |

| 303 Assembly Joint Seal - Modular Type<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                                  | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 | \$ 506 Repair   |   |   |

|  |   |  |  |  |
|--|---|--|--|--|
|  | 4 |  |  |  |
|  | 5 |  |  |  |

| 304 Open Expansion Joint<br>/ meter |   | Condition After                  |               |   |
|-------------------------------------|---|----------------------------------|---------------|---|
|                                     |   | 1                                | 2             | 3 |
| Condition Before                    | 1 |                                  |               |   |
|                                     | 2 | \$ 56.33 Coat<br>\$ 2.17 Replace |               |   |
|                                     | 3 |                                  | \$ 22.42 Coat |   |
|                                     | 4 |                                  |               |   |
|                                     | 5 |                                  |               |   |

| 311 Moveable Bearing (roller, sliding, etc.)<br>/ each |   | Condition After |             |   |
|--|---|-----------------|-------------|---|
|  |   | 1               | 2           | 3 |
| Condition Before                                       | 1 |                 |             |   |
|  | 2 | \$ 1.82 Coat    |             |   |
|  | 3 |                 | \$ 541 Coat |   |
|  | 4 |                 |             |   |
|  | 5 |                 |             |   |

| 313 Fixed Bearing<br>/ each |   | Condition After |   |   |
|-----------------------------|---|-----------------|---|---|
|                             |   | 1               | 2 | 3 |
| Condition Before            | 1 |                 |   |   |
|                             | 2 | \$ 64.33 Coat   |   |   |
|                             | 3 |                 |   |   |
|                             | 4 |                 |   |   |
|                             | 5 |                 |   |   |

| 330 Metal Bridge Railing - coated or uncoated<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 | \$ 2,275 Repair |   |   |
|  | 3 | \$ 99 Replace   |   |   |
|  | 4 | \$ 10,398 Coat  |   |   |
|  | 5 |                 |   |   |

| 331 Reinforced Conc Bridge Railing<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                              | 1 |                 |   |   |
|   | 2 | \$ 99 Replace   |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 332 Timber Bridge Railing<br>/ meter |   | Condition After              |   |   |
|--------------------------------------|---|------------------------------|---|---|
|                                      |   | 1                            | 2 | 3 |
| Condition Before                     | 1 |                              |   |   |
|                                      | 2 | \$ 385 Coat<br>\$ 120 Repair |   |   |
|                                      | 3 |                              |   |   |
|                                      | 4 |                              |   |   |
|                                      | 5 |                              |   |   |

| 333 Other Bridge Railing<br>/ meter |   | Condition After                |   |   |
|-------------------------------------|---|--------------------------------|---|---|
|                                     |   | 1                              | 2 | 3 |
| Condition Before                    | 1 |                                |   |   |
|                                     | 2 | \$ 104 Repair                  |   |   |
|                                     | 3 | \$ 48.13 Coat<br>\$ 439 Repair |   |   |
|                                     | 4 |                                |   |   |
|                                     | 5 |                                |   |   |

| 334 Misc. Railing with 0.33 m sidewalk<br>/ meter |   | Condition After                  |   |   |
|---|---|----------------------------------|---|---|
|   |   | 1                                | 2 | 3 |
| Condition Before                                  | 1 |                                  |   |   |
|   | 2 | \$ 31.40 Coat<br>\$ 13.65 Repair |   |   |
|   | 3 | \$ 78.46 Coat                    |   |   |
|   | 4 |                                  |   |   |
|   | 5 |                                  |   |   |

| 335 Other Bridge Railing<br>/ meter |   | Condition After |   |   |
|-------------------------------------|---|-----------------|---|---|
|                                     |   | 1               | 2 | 3 |
| Condition Before                    | 1 |                 |   |   |
|                                     | 2 | \$ 178 Repair   |   |   |
|                                     | 3 |                 |   |   |
|                                     | 4 |                 |   |   |
|                                     | 5 |                 |   |   |

| 339 Concrete Railing (aesthetic/masonry)<br>/ meter |   | Condition After |               |   |
|---|---|-----------------|---------------|---|
|   |   | 1               | 2             | 3 |
| Condition Before                                    | 1 |                 |               |   |
|   | 2 | \$ 1.94 Modify  |               |   |
|   | 3 |                 | \$ 136 Repair |   |
|   | 4 |                 |               |   |
|   | 5 |                 |               |   |

| 358 Deck Cracking<br>/ each |   | Condition After                   |   |                                 |
|-----------------------------|---|-----------------------------------|---|---------------------------------|
|                             |   | 1                                 | 2 | 3                               |
| Condition Before            | 1 |                                   |   |                                 |
|                             | 2 |                                   |   |                                 |
|                             | 3 | \$ 98,876 Coat<br>\$ 2,488 Repair |   |                                 |
|                             | 4 | \$ 34.00 Maint<br>\$ 3,981 Repair |   | \$ 349 Maint<br>\$ 3,329 Repair |
|                             | 5 |                                   |   |                                 |

| 359 Soffit of Concrete Deck or Slab<br>/ each |   | Condition After |   |                |
|---|---|-----------------|---|----------------|
|   |   | 1               | 2 | 3              |
| Condition Before                              | 1 |                 |   |                |
|   | 2 |                 |   |                |
|   | 3 |                 |   |                |
|   | 4 |                 |   |                |
|   | 5 |                 |   | \$ 3,477 Maint |

| 363 Section Loss<br>/ each |   | Condition After |   |   |
|----------------------------|---|-----------------|---|---|
|                            |   | 1               | 2 | 3 |
| Condition Before           | 1 |                 |   |   |
|                            | 2 | \$ 10,595 Coat  |   |   |
|                            | 3 |                 |   |   |
|                            | 4 |                 |   |   |
|                            | 5 |                 |   |   |

Table A3- 3 Oregon Element-Level Unit Costs

| 12 Concrete Deck - Bare<br>/ square meter |   | Condition After |                |   |
|---|---|-----------------|----------------|---|
|   |   | 1               | 2              | 3 |
| Condition Before                          | 1 |                 |                |   |
|   | 2 | \$ 0.07 Maint   |                |   |
|   | 3 |                 | \$ 0.14 Repair |   |
|   | 4 |                 | \$ 0.02 Maint  |   |
|   | 5 |                 |                |   |

| 13 Conc. Deck - Unprotected w/ AC Overlay<br>/ square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 0.73 Maint   |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 18 Concrete Deck - Protected w/ Thin Overlay<br>/ square meter |   | Condition After |   |               |
|--|---|-----------------|---|---------------|
|  |   | 1               | 2 | 3             |
| Condition Before   | 1 |                 |   |               |
|  | 2 |                 |   |               |
|  | 3 |                 |   |               |
|  | 4 |                 |   | \$ 0.04 Maint |
|  | 5 |                 |   |               |

| 22 Concrete Deck - Protected w/ Rigid Overlay<br>/ square meter |   | Condition After |   |                                |
|---|---|-----------------|---|--------------------------------|
|   |   | 1               | 2 | 3                              |
| Condition Before  | 1 |                 |   |                                |
|   | 2 |                 |   |                                |
|   | 3 |                 |   |                                |
|   | 4 |                 |   |                                |
|   | 5 |                 |   | \$ 0.03 Coat<br>\$ 1.03 Repair |

| 32 Timber Deck - w/ AC Overlay<br>/ square meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                                 | 1 |                 |   |   |
|  | 2 | \$ 4.00 Repair  |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 38 Concrete Slab - Bare<br>/ square meter |   | Condition After |               |   |
|---|---|-----------------|---------------|---|
|   |   | 1               | 2             | 3 |
| Condition Before                          | 1 |                 |               |   |
|   | 2 |                 |               |   |
|   | 3 |                 | \$ 0.73 Maint |   |
|   | 4 |                 |               |   |
|   | 5 |                 |               |   |

| 52 Concrete Slab - w/ Coated Bars<br>/ square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                                    | 1 |                 |   |   |
|   | 2 | \$ 0.12 Maint   |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 102 Painted Steel Closed Web/Box Girder<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                                   | 1 |                 |   |   |
|  | 2 | \$ 1.23 Maint   |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 104 Prestressed / Post-Tension Closed<br>Web/Box Girder (incl voided slabs)<br>/ meter |   | Condition After |               |   |
|--|---|-----------------|---------------|---|
|  |   | 1               | 2             | 3 |
| Condition Before   | 1 |                 |               |   |
|  | 2 |                 |               |   |
|  | 3 |                 | \$ 0.45 Maint |   |
|  | 4 |                 |               |   |
|  | 5 |                 |               |   |

| 105 Reinforced Concrete Closed Web/Box<br>Girder<br>/ meter |   | Condition After |              |               |
|---|---|-----------------|--------------|---------------|
|   |   | 1               | 2            | 3             |
| Condition Before  | 1 |                 |              |               |
|   | 2 |                 |              |               |
|   | 3 | \$ 0.39 Maint   | \$ 0.63 Coat |               |
|   | 4 |                 |              | \$ 0.27 Maint |
|   | 5 |                 |              |               |



| 107 Painted Steel Open Girder/Beam<br>/ meter |   | Condition After                   |                                 |   |
|---|---|-----------------------------------|---------------------------------|---|
|   |   | 1                                 | 2                               | 3 |
| Condition Before                              | 1 |                                   |                                 |   |
|   | 2 | \$ 0.32 Maint                     |                                 |   |
|   | 3 | \$ 0.25 Maint<br>\$ 0.04 Coat     |                                 |   |
|   | 4 | \$ 23.22 Maint<br>\$ 30.88 Repair | \$ 0.01 Reset<br>\$ 1.22 Repair |   |
|   | 5 |                                   |                                 |   |

| 110 Reinforced Concrete Open Girder/Beam<br>/ meter |   | Condition After                                |  |   |
|---|---|--|--|---|
|   |   | 1  | 2  | 3 |
| Condition Before                                    | 1 |  |  |   |
|   | 2 | \$ 0.29 Maint<br>\$ 0.13 Coat<br>\$ 0.09 Reset |  |   |
|   | 3 |  | \$ 0.42 Maint<br>\$ 0.09 Coat<br>\$ 0.01 Reset<br>\$ 1.28 Repair |   |
|   | 4 |  |  |   |
|   | 5 |  |  |   |

| 111 Timber Open Girder/Beam<br>/ meter |   | Condition After |               |   |
|--|---|-----------------|---------------|---|
|  |   | 1               | 2             | 3 |
| Condition Before                       | 1 |                 |               |   |
|  | 2 |                 |               |   |
|  | 3 |                 | \$ 4.10 Maint |   |
|  | 4 |                 |               |   |
|  | 5 |                 |               |   |

| 113 Painted Steel Stringer<br>(stringer/floorbeam system)<br>/ meter |   | Condition After  |   |   |
|--|---|--|---|---|
|  |   | 1  | 2   | 3 |
| Condition Before   | 1 |  |   |   |
|  | 2 | \$ 0.02 Maint  |   |   |
|  | 3 | \$ 21.20 Maint<br>\$ 1.51 Coat<br>\$ 0.13 Reset<br>\$ 23.93 Repair | \$ 0.49 Maint<br>\$ 0.03 Coat<br>\$ 1.79 Repair |   |
|  | 4 |  |   |   |
|  | 5 |  |   |   |

| 121 Painted Steel Thru Truss (bottom chord) | Condition After |  |  |
|---|-----------------|--|--|
|---|-----------------|--|--|

| / meter          |   | Condition After |   |   |
|------------------|---|-----------------|---|---|
|                  |   | 1               | 2 | 3 |
| Condition Before | 1 |                 |   |   |
|                  | 2 | \$ 0.22 Maint   |   |   |
|                  | 3 |                 |   |   |
|                  | 4 |                 |   |   |
|                  | 5 |                 |   |   |

| 126 Painted Steel Thru Truss (excl. bottom chord)<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2   | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 | \$ 0.38 Maint   |   |   |
|  | 3 | \$ 20.15 Maint  | \$ 0.06 Maint<br>\$ 1.09 Coat<br>\$ 1.68 Repair |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 144 Reinforced Concrete Arch (includes arch and bottom chord)<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 | \$ 0.61 Maint   |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 152 Painted Steel Floorbeam<br>/ meter |   | Condition After |                               |                 |
|--|---|-----------------|-------------------------------|-----------------|
|  |   | 1               | 2                             | 3               |
| Condition Before                       | 1 |                 |                               |                 |
|  | 2 | \$ 0.08 Maint   |                               |                 |
|  | 3 |                 | \$ 0.54 Maint<br>\$ 0.08 Coat |                 |
|  | 4 |                 |                               | \$ 10.54 Repair |
|  | 5 |                 |                               |                 |

| 155 Reinforced Concrete Floorbeam<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                             | 1 |                 |   |   |
|  | 2 | \$ 0.27 Maint   |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 202 Painted Steel Column or Pile Extension<br>/ each |   | Condition After                  |              |                |
|--|---|----------------------------------|--------------|----------------|
|  |   | 1                                | 2            | 3              |
| Condition Before                                     | 1 |                                  |              |                |
|  | 2 | \$ 11.40 Maint<br>\$ 0.60 Repair |              |                |
|  | 3 |                                  | \$ 140 Maint |                |
|  | 4 |                                  |              | \$ 36.67 Maint |
|  | 5 |                                  |              |                |

| 204 Prestressed / Post-Tension Column or<br>Pile Extension<br>/ each |   | Condition After |   |                                   |
|--|---|-----------------|---|-----------------------------------|
|  |   | 1               | 2 | 3                                 |
| Condition Before   | 1 |                 |   |                                   |
|  | 2 |                 |   |                                   |
|  | 3 |                 |   |                                   |
|  | 4 |                 |   | \$ 75.77 Maint<br>\$ 42.86 Repair |
|  | 5 |                 |   |                                   |

| 205 Reinforced Concrete Column or Pile<br>Extension<br>/ each |   | Condition After                  |   |                                |
|---|---|----------------------------------|---|--------------------------------|
|   |   | 1                                | 2 | 3                              |
| Condition Before  | 1 |                                  |   |                                |
|   | 2 | \$ 21.80 Coat<br>\$ 116 Repair   |   | \$ 660 Maint                   |
|   | 3 | \$ 17.02 Maint<br>\$ 0.89 Repair |   |                                |
|   | 4 |                                  |   | \$ 1.32 Maint<br>\$ 107 Repair |
|   | 5 |                                  |   |                                |

| 206 Timber Column or Pile Extension<br>/ each |   | Condition After                   |                                |   |
|---|---|-----------------------------------|--------------------------------|---|
|   |   | 1                                 | 2                              | 3 |
| Condition Before                              | 1 |                                   |                                |   |
|   | 2 | \$ 0.71 Maint<br>\$ 0.02 Reset    |                                |   |
|   | 3 | \$ 50.56 Maint                    | \$ 1.39 Maint<br>\$ 113 Repair |   |
|   | 4 | \$ 54.07 Maint<br>\$ 27.29 Repair |                                |   |
|   | 5 |                                   |                                |   |

| 210 Reinforced Concrete Pier Wall<br>/ each |   | Condition After                 |   |   |
|---|---|---------------------------------|---|---|
|   |   | 1                               | 2 | 3 |
| Condition Before                            | 1 |                                 |   |   |
|   | 2 | \$ 2.89 Maint<br>\$ 0.11 Repair |   |   |
|   | 3 |                                 |   |   |
|   | 4 |                                 |   |   |
|   | 5 |                                 |   |   |

| 215 Reinforced Concrete Abutment<br>/ each |   | Condition After               |   |   |
|--|---|-------------------------------|---|---|
|  |   | 1                             | 2 | 3 |
| Condition Before                           | 1 |                               |   |   |
|  | 2 | \$ 1.16 Maint<br>\$ 8.54 Coat |   |   |
|  | 3 |                               |   |   |
|  | 4 |                               |   |   |
|  | 5 |                               |   |   |

| 231 Painted Steel Cap<br>/ each |   | Condition After |               |   |
|---------------------------------|---|-----------------|---------------|---|
|                                 |   | 1               | 2             | 3 |
| Condition Before                | 1 |                 |               |   |
|                                 | 2 |                 |               |   |
|                                 | 3 |                 | \$ 2.77 Maint |   |
|                                 | 4 |                 |               |   |
|                                 | 5 |                 |               |   |

| 234 Reinforced Concrete Cap<br>/ each |   | Condition After               |                              |   |
|---------------------------------------|---|-------------------------------|------------------------------|---|
|                                       |   | 1                             | 2                            | 3 |
| Condition Before                      | 1 |                               |                              |   |
|                                       | 2 | \$ 1.16 Maint<br>\$ 0.03 Coat |                              |   |
|                                       | 3 |                               | \$ 112 Maint<br>\$ 0.39 Coat |   |
|                                       | 4 | \$ 0.59 Maint                 |                              |   |
|                                       | 5 |                               |                              |   |

| 235 Timber Cap<br>/ each |   | Condition After                                  |   |   |
|--------------------------|---|--|---|---|
|                          |   | 1  | 2 | 3 |
| Condition Before         | 1 |  |   |   |
|                          | 2 | \$ 0.39 Maint<br>\$ 0.22 Reset<br>\$ 4.04 Repair |   |   |
|                          | 3 |  |   |   |
|                          | 4 | \$ 0.16 Maint                                    |   |   |

|                               |   |                 |   |   |
|-------------------------------|---|-----------------|---|---|
|                               |   | \$ 1.05 Repair  |   |   |
|                               | 5 |                 |   |   |
| 241 Concrete Culverts / meter |   | Condition After |   |   |
|                               |   | 1               | 2 | 3 |
| Condition Before              | 1 |                 |   |   |
|                               | 2 |                 |   |   |
|                               | 3 | \$ 10.34 Maint  |   |   |
|                               | 4 |                 |   |   |
|                               | 5 |                 |   |   |

|   |   |                                 |                |   |
|---|---|---------------------------------|----------------|---|
| 300 Strip Seal Expansion Joints / meter |   | Condition After                 |                |   |
|   |   | 1                               | 2              | 3 |
| Condition Before                        | 1 |                                 |                |   |
|   | 2 |                                 |                |   |
|   | 3 | \$ 41.88 Maint<br>\$ 321 Repair | \$ 19.36 Maint |   |
|   | 4 |                                 |                |   |
|   | 5 |                                 |                |   |

|                                  |   |                 |               |   |
|----------------------------------|---|-----------------|---------------|---|
| 301 Silicone Joint Seals / meter |   | Condition After |               |   |
|                                  |   | 1               | 2             | 3 |
| Condition Before                 | 1 |                 |               |   |
|                                  | 2 |                 |               |   |
|                                  | 3 |                 | \$ 1.31 Maint |   |
|                                  | 4 |                 |               |   |
|                                  | 5 |                 |               |   |

|  |   |                                |                               |   |
|--|---|--------------------------------|-------------------------------|---|
| 302 Polyfoam Compression Joint Seals / meter |   | Condition After                |                               |   |
|  |   | 1                              | 2                             | 3 |
| Condition Before                             | 1 |                                |                               |   |
|  | 2 | \$ 0.66 Maint                  |                               |   |
|  | 3 | \$ 81.09 Maint<br>\$ 1.29 Coat | \$ 0.14 Maint<br>\$ 0.10 Coat |   |
|  | 4 |                                |                               |   |
|  | 5 |                                |                               |   |

|  |   |                 |                |   |
|--|---|-----------------|----------------|---|
| 303 Modular Joint Assembly / Seals / meter |   | Condition After |                |   |
|  |   | 1               | 2              | 3 |
| Condition Before                           | 1 |                 |                |   |
|  | 2 | \$ 3.92 Maint   |                |   |
|  | 3 | \$ 16.48 Maint  | \$ 14.55 Maint |   |
|  | 4 |                 |                |   |
|  | 5 |                 |                |   |

| 304 Open Expansion Joints<br>/ meter |   | Condition After              |              |   |
|--------------------------------------|---|------------------------------|--------------|---|
|                                      |   | 1                            | 2            | 3 |
| Condition Before                     | 1 |                              |              |   |
|                                      | 2 | \$ 335 Maint<br>\$ 181 Reset |              |   |
|                                      | 3 |                              | \$ 129 Maint |   |
|                                      | 4 |                              |              |   |
|                                      | 5 |                              |              |   |

| 305 Polychloroprene Compression Joint Seals<br>/ meter |   | Condition After |                                |   |
|--|---|-----------------|--------------------------------|---|
|  |   | 1               | 2                              | 3 |
| Condition Before                                       | 1 |                 |                                |   |
|  | 2 | \$ 1.15 Maint   |                                |   |
|  | 3 | \$ 2.82 Maint   | \$ 14.08 Maint<br>\$ 0.41 Coat |   |
|  | 4 |                 |                                |   |
|  | 5 |                 |                                |   |

| 306 Asphaltic Plug Joint Seals<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                          | 1 |                 |   |   |
|   | 2 | \$ 26.23 Maint  |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 309 Other Expansion Joint Seals<br>/ meter |   | Condition After                                  |                                |   |
|--|---|--|--------------------------------|---|
|  |   | 1  | 2                              | 3 |
| Condition Before                           | 1 |  |                                |   |
|  | 2 | \$ 2.78 Maint<br>\$ 0.84 Coat<br>\$ 21.15 Repair |                                |   |
|  | 3 | \$ 22.05 Maint                                   | \$ 17.77 Maint<br>\$ 0.73 Coat |   |
|  | 4 |  |                                |   |
|  | 5 |  |                                |   |

| 310 Elastomeric Bearings<br>/ each |   | Condition After |               |   |
|------------------------------------|---|-----------------|---------------|---|
|                                    |   | 1               | 2             | 3 |
| Condition Before                   | 1 |                 |               |   |
|                                    | 2 | \$ 11.71 Maint  |               |   |
|                                    | 3 |                 | \$ 8.00 Maint |   |
|                                    | 4 |                 |               |   |
|                                    | 5 |                 |               |   |



| 311 Movable Bearings (roller, slider, etc.)<br>/ each |   | Condition After               |                                |   |
|---|---|-------------------------------|--------------------------------|---|
|   |   | 1                             | 2                              | 3 |
| Condition Before                                      | 1 |                               |                                |   |
|   | 2 | \$ 4.56 Maint<br>\$ 6.81 Coat |                                |   |
|   | 3 | \$ 21.35 Maint                | \$ 56.67 Maint<br>\$ 1.13 Coat |   |
|   | 4 |                               |                                |   |
|   | 5 |                               |                                |   |

| 313 Fixed Bearings<br>/ each |   | Condition After |                |   |
|------------------------------|---|-----------------|----------------|---|
|                              |   | 1               | 2              | 3 |
| Condition Before             | 1 |                 |                |   |
|                              | 2 | \$ 58.10 Maint  |                |   |
|                              | 3 | \$ 21.35 Maint  | \$ 81.00 Maint |   |
|                              | 4 |                 |                |   |
|                              | 5 |                 |                |   |

| 321 Reinforced Concrete Approach Slab<br>/ each |   | Condition After                                |   |              |
|---|---|--|---|--------------|
|   |   | 1  | 2 | 3            |
| Condition Before                                | 1 |  |   |              |
|   | 2 | \$ 232 Clean<br>\$ 43.75 Maint<br>\$ 4.50 Coat |   |              |
|   | 3 |  |   |              |
|   | 4 |  |   | \$ 450 Clean |
|   | 5 |  |   |              |

| 325 Roadway Impact Assessment<br>/ each |   | Condition After                 |                                 |   |
|---|---|---------------------------------|---------------------------------|---|
|   |   | 1                               | 2                               | 3 |
| Condition Before                        | 1 |                                 |                                 |   |
|   | 2 | \$ 17.20 Maint<br>\$ 12.80 Coat |                                 |   |
|   | 3 |                                 | \$ 28.67 Maint<br>\$ 43.50 Coat |   |
|   | 4 |                                 |                                 |   |
|   | 5 |                                 |                                 |   |



| 326 Deck Wearing Surface Condition Assessment / each |   | Condition After   |               |   |
|--|---|---|---------------|---|
|  |   | 1   | 2             | 3 |
| Condition Before                                     | 1 |   |               |   |
|  | 2 | \$ 44.38 Maint<br>\$ 27.67 Coat<br>\$ 2.44 Reset<br>\$ 446 Repair |               |   |
|  | 3 | \$ 12.80 Coat   | \$ 8.80 Maint |   |
|  | 4 |   |               |   |
|  | 5 |   |               |   |

| 330 Uncoated Metal Bridge Railing / meter |   | Condition After                 |   |   |
|---|---|---------------------------------|---|---|
|   |   | 1                               | 2 | 3 |
| Condition Before                          | 1 |                                 |   |   |
|   | 2 | \$ 6.01 Maint<br>\$ 8.60 Repair |   |   |
|   | 3 |                                 |   |   |
|   | 4 |                                 |   |   |
|   | 5 |                                 |   |   |

| 331 Reinforced Concrete Bridge Railing / meter |   | Condition After                                  |                                  |   |
|--|---|--|----------------------------------|---|
|  |   | 1  | 2                                | 3 |
| Condition Before                               | 1 |  |                                  |   |
|  | 2 | \$ 1.18 Maint<br>\$ 0.91 Coat<br>\$ 13.34 Repair |                                  |   |
|  | 3 | \$ 0.80 Maint<br>\$ 0.07 Repair                  | \$ 1.87 Maint<br>\$ 17.31 Repair |   |
|  | 4 |  |                                  |   |
|  | 5 |  |                                  |   |

| 332 Timber Bridge Railing / meter |   | Condition After                                  |   |   |
|-----------------------------------|---|--|---|---|
|                                   |   | 1  | 2 | 3 |
| Condition Before                  | 1 |  |   |   |
|                                   | 2 | \$ 10.87 Maint<br>\$ 100 Coat<br>\$ 53.78 Repair |   |   |
|                                   | 3 |  |   |   |
|                                   | 4 |  |   |   |
|                                   | 5 |  |   |   |

| 334 Coated Metal Bridge Railings<br>/ meter |   | Condition After                                 |                                 |   |
|---|---|---|---------------------------------|---|
|   |   | 1   | 2                               | 3 |
| Condition Before                            | 1 |   |                                 |   |
|   | 2 | \$ 3.08 Maint<br>\$ 2.15 Coat<br>\$ 5.35 Repair |                                 |   |
|   | 3 | \$ 2.69 Maint                                   | \$ 1.36 Maint<br>\$ 1.17 Repair |   |
|   | 4 |   |                                 |   |
|   | 5 |   |                                 |   |

| 356 Steel Fatigue Smart Flag<br>/ each |   | Condition After                |   |   |
|--|---|--------------------------------|---|---|
|  |   | 1                              | 2 | 3 |
| Condition Before                       | 1 |                                |   |   |
|  | 2 | \$ 90.20 Maint<br>\$ 5.90 Coat |   |   |
|  | 3 |                                |   |   |
|  | 4 |                                |   |   |
|  | 5 |                                |   |   |

| 357 Pack Rust Smart Flag<br>/ each |   | Condition After |               |   |
|------------------------------------|---|-----------------|---------------|---|
|                                    |   | 1               | 2             | 3 |
| Condition Before                   | 1 |                 |               |   |
|                                    | 2 |                 |               |   |
|                                    | 3 |                 | \$ 6.10 Maint |   |
|                                    | 4 |                 |               |   |
|                                    | 5 |                 |               |   |

| 358 Deck Cracking Smart Flag<br>/ each |   | Condition After  |              |  |
|--|---|--|--------------|--|
|  |   | 1  | 2            | 3  |
| Condition Before                       | 1 |  |              |  |
|  | 2 | \$ 136 Maint<br>\$ 39.52 Coat<br>\$ 56.88 Reset<br>\$ 855 Repair |              |  |
|  | 3 | \$ 13.00 Maint<br>\$ 7.56 Coat<br>\$ 1,693 Repair                | \$ 995 Maint |  |
|  | 4 | \$ 68.75 Coat  |              | \$ 74.07 Maint<br>\$ 19.69 Coat<br>\$ 2,355 Repair |
|  | 5 |  |              |  |

| 359 Soffit Cracking Smart Flag<br>/ each |   | Condition After  |                                   |   |
|--|---|--|-----------------------------------|---|
|  |   | 1  | 2                                 | 3 |
| Condition Before                         | 1 |  |                                   |   |
|  | 2 | \$ 426 Maint<br>\$ 34.71 Coat<br>\$ 56.67 Reset<br>\$ 2,028 Repair |                                   |   |
|  | 3 | \$ 58.33 Maint<br>\$ 114 Reset                                     |                                   |   |
|  | 4 | \$ 1,075 Maint<br>\$ 34,233<br>Repair                              | \$ 15.20 Maint<br>\$ 1,500 Repair |   |
|  | 5 |  |                                   |   |

| 361 Scour Smart Flag<br>/ each |   | Condition After   |                |   |
|--------------------------------|---|---|----------------|---|
|                                |   | 1   | 2              | 3 |
| Condition Before               | 1 |   |                |   |
|                                | 2 | \$ 205 Clean<br>\$ 378 Maint<br>\$ 13.63 Coat<br>\$ 0.75 Reset<br>\$ 63.92 Repair |                |   |
|                                | 3 |   | \$ 1,166 Clean |   |
|                                | 4 |   |                |   |
|                                | 5 |   |                |   |

| 362 Traffic Impact Smart Flag<br>/ each |   | Condition After |               |   |
|---|---|-----------------|---------------|---|
|   |   | 1               | 2             | 3 |
| Condition Before                        | 1 |                 |               |   |
|   | 2 | \$ 12.17 Coat   |               |   |
|   | 3 |                 | \$ 5.27 Maint |   |
|   | 4 |                 |               |   |
|   | 5 |                 |               |   |

| 363 Section Loss Smart Flag<br>/ each |   | Condition After |                |   |
|---------------------------------------|---|-----------------|----------------|---|
|                                       |   | 1               | 2              | 3 |
| Condition Before                      | 1 |                 |                |   |
|                                       | 2 | \$ 63.82 Maint  |                |   |
|                                       | 3 |                 | \$ 42.70 Maint |   |
|                                       | 4 |                 |                |   |
|                                       | 5 |                 |                |   |

| 390 Paint System - Alkyds (incl. red lead)<br>/ square meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 | \$ 0.05 Maint   |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 993 Fender System, Concrete<br>/ each |   | Condition After                 |   |   |
|---------------------------------------|---|---------------------------------|---|---|
|                                       |   | 1                               | 2 | 3 |
| Condition Before                      | 1 |                                 |   |   |
|                                       | 2 | \$ 10.50 Maint<br>\$ 170 Repair |   |   |
|                                       | 3 |                                 |   |   |
|                                       | 4 |                                 |   |   |
|                                       | 5 |                                 |   |   |

Table A3- 4 Tennessee Element-Level Unit Costs

| 12 Concrete Deck - Bare<br>/ square meter |   | Condition After |                |   |
|---|---|-----------------|----------------|---|
|   |   | 1               | 2              | 3 |
| Condition Before                          | 1 |                 |                |   |
|   | 2 |                 |                |   |
|   | 3 |                 | \$ 0.32 Repair |   |
|   | 4 |                 |                |   |
|   | 5 |                 |                |   |

| 13 Conc. Deck - Unprotected w/ AC Overlay<br>/ square meter |   | Condition After                 |                |   |
|---|---|---------------------------------|----------------|---|
|   |   | 1                               | 2              | 3 |
| Condition Before  | 1 |                                 |                |   |
|   | 2 | \$ 0.08 Clean<br>\$ 1.16 Repair |                |   |
|   | 3 | \$ 0.36 Repair                  | \$ 0.73 Repair |   |
|   | 4 | \$ 0.12 Clean                   |                |   |
|   | 5 | \$ 0.47 Repair                  |                |   |

| 14 Conc. Deck - Protected w/ AC Overlay<br>/ square meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 0.07 Maint   |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 104 Prestressed / Post-Tension Closed<br>Web/Box Girder (incl voided slabs)<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 | \$ 1.27 Repair  |   |   |
|  | 3 | \$ 79.64 Repair |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 107 Painted Steel Open Girder/Beam<br>/ meter |   | Condition After |                               |   |
|---|---|-----------------|-------------------------------|---|
|   |   | 1               | 2                             | 3 |
| Condition Before                              | 1 |                 |                               |   |
|   | 2 | \$ 1.17 Repair  |                               |   |
|   | 3 | \$ 205 Repair   |                               |   |
|   | 4 |                 | \$ 198 Clean<br>\$ 195 Repair |   |
|   | 5 |                 |                               |   |



| 109 Prestressed / Post-Tension Open Girder/Beam / meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before  | 1 |                 |   |   |
|   | 2 | \$ 355 Repair   |   |   |
|   | 3 |                 |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 110 Reinforced Concrete Open Girder/Beam / meter |   | Condition After                  |               |   |
|--|---|----------------------------------|---------------|---|
|  |   | 1                                | 2             | 3 |
| Condition Before                                 | 1 |                                  |               |   |
|  | 2 | \$ 4.75 Clean<br>\$ 11.62 Repair |               |   |
|  | 3 | \$ 92.65 Repair                  | \$ 103 Repair |   |
|  | 4 |                                  |               |   |
|  | 5 |                                  |               |   |

| 113 Painted Steel Stringer (stringer/floorbeam system) / meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before   | 1 |                 |   |   |
|  | 2 |                 |   |   |
|  | 3 | \$ 8.22 Repair  |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 116 Reinforced Concrete Stringer (stringer/floorbeam system) / meter |   | Condition After |                 |   |
|--|---|-----------------|-----------------|---|
|  |   | 1               | 2               | 3 |
| Condition Before   | 1 |                 |                 |   |
|  | 2 | \$ 50.77 Repair |                 |   |
|  | 3 |                 | \$ 1,478 Repair |   |
|  | 4 | \$ 33.97 Repair |                 |   |
|  | 5 |                 |                 |   |

| 145 Other Arch / meter |   | Condition After |                |   |
|------------------------|---|-----------------|----------------|---|
|                        |   | 1               | 2              | 3 |
| Condition Before       | 1 |                 |                |   |
|                        | 2 |                 |                |   |
|                        | 3 |                 | \$ 9.05 Repair |   |
|                        | 4 |                 |                |   |
|                        | 5 |                 |                |   |

| 152 Painted Steel Floorbeam<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                       | 1 |                 |   |   |
|  | 2 | \$ 1.24 Repair  |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 202 Painted Steel Column or Pile Extension<br>/ each |   | Condition After                 |                 |   |
|--|---|---------------------------------|-----------------|---|
|  |   | 1                               | 2               | 3 |
| Condition Before                                     | 1 |                                 |                 |   |
|  | 2 | \$ 1.78 Clean<br>\$ 2.74 Repair |                 |   |
|  | 3 |                                 | \$ 25.91 Repair |   |
|  | 4 |                                 |                 |   |
|  | 5 |                                 |                 |   |

| 205 Reinforced Concrete Column or Pile<br>Extension<br>/ each |   | Condition After                 |   |   |
|---|---|---------------------------------|---|---|
|   |   | 1                               | 2 | 3 |
| Condition Before  | 1 |                                 |   |   |
|   | 2 | \$ 59.47 Clean<br>\$ 282 Repair |   |   |
|   | 3 | \$ 3,316 Repair                 |   |   |
|   | 4 |                                 |   |   |
|   | 5 |                                 |   |   |

| 206 Timber Column or Pile Extension<br>/ each |   | Condition After |               |   |
|---|---|-----------------|---------------|---|
|   |   | 1               | 2             | 3 |
| Condition Before                              | 1 |                 |               |   |
|   | 2 | \$ 4.22 Repair  |               |   |
|   | 3 | \$ 1,061 Repair | \$ 153 Repair |   |
|   | 4 | \$ 169 Repair   |               |   |
|   | 5 |                 |               |   |

| 210 Reinforced Concrete Pier Wall<br>/ each |   | Condition After                 |   |   |
|---|---|---------------------------------|---|---|
|   |   | 1                               | 2 | 3 |
| Condition Before                            | 1 |                                 |   |   |
|   | 2 | \$ 12.77 Clean<br>\$ 244 Repair |   |   |
|   | 3 |                                 |   |   |
|   | 4 |                                 |   |   |
|   | 5 |                                 |   |   |



| 215 Reinforced Concrete Abutment<br>/ each |   | Condition After                                   |   |   |
|--|---|---|---|---|
|  |   | 1   | 2 | 3 |
| Condition Before                           | 1 |   |   |   |
|  | 2 | \$ 53.45 Clean<br>\$ 67.14 Maint<br>\$ 341 Repair |   |   |
|  | 3 | \$ 164 Repair                                     |   |   |
|  | 4 |   |   |   |
|  | 5 |   |   |   |

| 216 Timber Abutment<br>/ each |   | Condition After |   |   |
|-------------------------------|---|-----------------|---|---|
|                               |   | 1               | 2 | 3 |
| Condition Before              | 1 |                 |   |   |
|                               | 2 | \$ 403 Repair   |   |   |
|                               | 3 | \$ 1,308 Repair |   |   |
|                               | 4 |                 |   |   |
|                               | 5 |                 |   |   |

| 217 Other Abutment<br>/ each |   | Condition After |        |   |
|------------------------------|---|-----------------|--------|---|
|                              |   | 1               | 2      | 3 |
| Condition Before             | 1 |                 |        |   |
|                              | 2 |                 |        |   |
|                              | 3 |                 | \$ 263 |   |
|                              | 4 |                 |        |   |
|                              | 5 |                 |        |   |

| 234 Reinforced Concrete Cap<br>/ each |   | Condition After                                  |   |                                 |
|---------------------------------------|---|--|---|---------------------------------|
|                                       |   | 1  | 2 | 3                               |
| Condition Before                      | 1 |  |   |                                 |
|                                       | 2 | \$ 4.43 Clean<br>\$ 14.35 Maint<br>\$ 177 Repair |   |                                 |
|                                       | 3 | \$ 27.81 Clean<br>\$ 111 Repair                  |   |                                 |
|                                       | 4 | \$ 0.46 Clean<br>\$ 0.70 Repair                  |   | \$ 142 Clean<br>\$ 3,985 Repair |
|                                       | 5 |  |   |                                 |

| 235 Timber Cap<br>/ each |   | Condition After |                 |   |
|--------------------------|---|-----------------|-----------------|---|
|                          |   | 1               | 2               | 3 |
| Condition Before         | 1 |                 |                 |   |
|                          | 2 | \$ 11.44 Repair |                 |   |
|                          | 3 | \$ 292 Repair   | \$ 46.68 Repair |   |
|                          | 4 |                 |                 |   |
|                          | 5 |                 |                 |   |

| 241 Concrete Culverts<br>/ meter |   | Condition After |   |   |
|----------------------------------|---|-----------------|---|---|
|                                  |   | 1               | 2 | 3 |
| Condition Before                 | 1 |                 |   |   |
|                                  | 2 | \$ 346 Repair   |   |   |
|                                  | 3 |                 |   |   |
|                                  | 4 |                 |   |   |
|                                  | 5 |                 |   |   |

| 300 Strip Seal Expansion Joints<br>/ meter |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                           | 1 |                 |   |   |
|  | 2 | \$ 1,085 Repair |   |   |
|  | 3 |                 |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 301 Silicone Joint Seals<br>/ meter |   | Condition After                 |   |   |
|-------------------------------------|---|---------------------------------|---|---|
|                                     |   | 1                               | 2 | 3 |
| Condition Before                    | 1 |                                 |   |   |
|                                     | 2 | \$ 7.98 Clean<br>\$ 3.61 Repair |   |   |
|                                     | 3 |                                 |   |   |
|                                     | 4 |                                 |   |   |
|                                     | 5 |                                 |   |   |

| 302 Polyfoam Compression Joint Seals<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                                | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 | \$ 77.49 Repair |   |   |
|   | 4 |                 |   |   |
|   | 5 |                 |   |   |

| 303 Modular Joint Assembly / Seals<br>/ meter |   | Condition After |                |   |
|---|---|-----------------|----------------|---|
|   |   | 1               | 2              | 3 |
| Condition Before                              | 1 |                 |                |   |
|   | 2 | \$ 78.09 Repair |                |   |
|   | 3 |                 | \$ 23.51 Clean |   |
|   | 4 |                 |                |   |
|   | 5 |                 |                |   |

| 311 Movable Bearings (roller, slider, etc.)<br>/ each |   | Condition After |                 |   |
|---|---|-----------------|-----------------|---|
|   |   | 1               | 2               | 3 |
| Condition Before                                      | 1 |                 |                 |   |
|   | 2 | \$ 42.27 Repair |                 |   |
|   | 3 | \$ 6.66 Clean   | \$ 63.07 Repair |   |
|   | 4 |                 |                 |   |
|   | 5 |                 |                 |   |

| 331 Reinforced Concrete Bridge Railing<br>/ meter |   | Condition After                  |                                    |   |
|---|---|----------------------------------|------------------------------------|---|
|   |   | 1                                | 2                                  | 3 |
| Condition Before                                  | 1 |                                  |                                    |   |
|   | 2 | \$ 3.36 Clean<br>\$ 68.90 Repair |                                    |   |
|   | 3 | \$ 1.99 Clean<br>\$ 34.94 Repair |                                    |   |
|   | 4 |                                  | \$ 353.86 Clean<br>\$ 1,456 Repair |   |
|   | 5 |                                  |                                    |   |

| 333 Other Bridge Railings<br>/ meter |   | Condition After |   |   |
|--------------------------------------|---|-----------------|---|---|
|                                      |   | 1               | 2 | 3 |
| Condition Before                     | 1 |                 |   |   |
|                                      | 2 | \$ 10.93 Repair |   |   |
|                                      | 3 |                 |   |   |
|                                      | 4 |                 |   |   |
|                                      | 5 |                 |   |   |

| 334 Coated Metal Bridge Railings<br>/ meter |   | Condition After |   |   |
|---|---|-----------------|---|---|
|   |   | 1               | 2 | 3 |
| Condition Before                            | 1 |                 |   |   |
|   | 2 |                 |   |   |
|   | 3 | \$ 321 Repair   |   |   |
|   | 4 | \$ 1,062 Repair |   |   |
|   | 5 |                 |   |   |

| 356 Steel Fatigue Smart Flag<br>/ each |   | Condition After     |   |   |
|--|---|---------------------|---|---|
|  |   | 1                   | 2 | 3 |
| Condition Before                       | 1 |                     |   |   |
|  | 2 | \$ 15,295<br>Repair |   |   |
|  | 3 |                     |   |   |
|  | 4 |                     |   |   |
|  | 5 |                     |   |   |

| 359 Soffit Cracking Smart Flag<br>/ each |   | Condition After |   |   |
|--|---|-----------------|---|---|
|  |   | 1               | 2 | 3 |
| Condition Before                         | 1 |                 |   |   |
|  | 2 |                 |   |   |
|  | 3 | \$ 6,512 Repair |   |   |
|  | 4 |                 |   |   |
|  | 5 |                 |   |   |

| 360 Settlement Smart Flag<br>/ each |   | Condition After |   |   |
|-------------------------------------|---|-----------------|---|---|
|                                     |   | 1               | 2 | 3 |
| Condition Before                    | 1 |                 |   |   |
|                                     | 2 | \$ 328 Repair   |   |   |
|                                     | 3 |                 |   |   |
|                                     | 4 |                 |   |   |
|                                     | 5 |                 |   |   |

