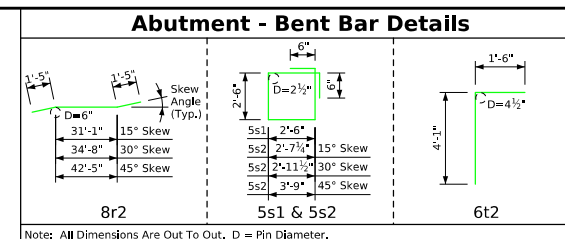


| Bill of Reinforcing Steel - One Abutment - 0 Deg. Skew |                                     |       |         |     |        |     |        |     |        |     |        |
|--------------------------------------------------------|-------------------------------------|-------|---------|-----|--------|-----|--------|-----|--------|-----|--------|
| Bridge Length                                          |                                     |       | 20'-0"  |     | 30'-0" |     | 40'-0" |     | 50'-0" |     |        |
| Bar                                                    | Location                            | Shape | Length  | No. | Weight | No. | Weight | No. | Weight | No. | Weight |
| 8r1                                                    | Abutment Footing Longitudinal       |       | 32'-10" | 7   | 614    | 7   | 614    | 7   | 614    | 7   | 614    |
| 5s1                                                    | Abutment Footing Hoops              |       | 11'-0"  | 28  | 321    | 29  | 333    | 28  | 321    | 25  | 287    |
| 6t1                                                    | Footing to Slab Dowels              |       | 5'-0"   | 36  | 270    | 36  | 270    | 36  | 270    | 36  | 270    |
| 6t2                                                    | Footing to Slab Dowels              |       | 5'-7"   | 36  | 302    | 36  | 302    | 36  | 302    | 36  | 302    |
| #2                                                     | Pile Spiral                         |       | 38'-6"  | 5   | 32     | 6   | 39     | 7   | 45     | 8   | 51     |
|                                                        | Spiral Spacers, L 7/8x7/8x1/8x 0.70 |       | 1'-10"  | 15  | 19     | 18  | 23     | 21  | 27     | 24  | 31     |
| Epoxy Coated Reinforcing Steel - Total (lbs.)          |                                     |       |         |     | 1,507  |     | 1,519  |     | 1,507  |     | 1,473  |
| Non-Coated Reinforcing Steel - Total (lbs.)            |                                     |       |         |     | 51     |     | 62     |     | 72     |     | 82     |

| Bill of Reinforcing Steel - One Abutment - 15 Deg. Skew |                                     |       |         |     |        |     |        |     |        |     |        |
|---------------------------------------------------------|-------------------------------------|-------|---------|-----|--------|-----|--------|-----|--------|-----|--------|
| Bridge Length                                           |                                     |       | 20'-0"  |     | 30'-0" |     | 40'-0" |     | 50'-0" |     |        |
| Bar                                                     | Location                            | Shape | Length  | No. | Weight | No. | Weight | No. | Weight | No. | Weight |
| 8r2                                                     | Abutment Footing Longitudinal       |       | 33'-11" | 7   | 634    | 7   | 634    | 7   | 634    | 7   | 634    |
| 5s1                                                     | Abutment Footing Hoops              |       | 11'-0"  | 24  | 275    | 25  | 287    | 24  | 275    | 24  | 275    |
| 5s2                                                     | Abutment Footing Hoops              |       | 11'-3"  | 4   | 47     | 4   | 47     | 4   | 47     | 4   | 47     |
| 6t1                                                     | Footing to Slab Dowels              |       | 5'-0"   | 36  | 270    | 36  | 270    | 36  | 270    | 36  | 270    |
| 6t2                                                     | Footing to Slab Dowels              |       | 5'-7"   | 36  | 302    | 36  | 302    | 36  | 302    | 36  | 302    |
| #2                                                      | Pile Spiral                         |       | 38'-6"  | 5   | 32     | 6   | 39     | 7   | 45     | 8   | 51     |
|                                                         | Spiral Spacers, L 7/8x7/8x1/8x 0.70 |       | 1'-10"  | 15  | 19     | 18  | 23     | 21  | 27     | 24  | 31     |
| Epoxy Coated Reinforcing Steel - Total (lbs.)           |                                     |       |         |     | 1,528  |     | 1,540  |     | 1,528  |     | 1,528  |
| Non-Coated Reinforcing Steel - Total (lbs.)             |                                     |       |         |     | 51     |     | 62     |     | 72     |     | 82     |

| Bill of Reinforcing Steel - One Abutment - 30 Deg. Skew |                                     |       |         |     |        |     |        |     |        |     |        |
|---------------------------------------------------------|-------------------------------------|-------|---------|-----|--------|-----|--------|-----|--------|-----|--------|
| Bridge Length                                           |                                     |       | 20'-0"  |     | 30'-0" |     | 40'-0" |     | 50'-0" |     |        |
| Bar                                                     | Location                            | Shape | Length  | No. | Weight | No. | Weight | No. | Weight | No. | Weight |
| 8r2                                                     | Abutment Footing Longitudinal       |       | 37'-6"  | 7   | 701    | 7   | 701    | 7   | 701    | 7   | 701    |
| 5s1                                                     | Abutment Footing Hoops              |       | 11'-0"  | 30  | 344    | 30  | 344    | 30  | 344    | 28  | 321    |
| 5s2                                                     | Abutment Footing Hoops              |       | 11'-11" | 4   | 50     | 4   | 50     | 4   | 50     | 4   | 50     |
| 6t1                                                     | Footing to Slab Dowels              |       | 5'-0"   | 36  | 270    | 36  | 270    | 36  | 270    | 36  | 270    |
| 6t2                                                     | Footing to Slab Dowels              |       | 5'-7"   | 36  | 302    | 36  | 302    | 36  | 302    | 36  | 302    |
| #2                                                      | Pile Spiral                         |       | 38'-6"  | 6   | 39     | 6   | 39     | 7   | 45     | 8   | 51     |
|                                                         | Spiral Spacers, L 7/8x7/8x1/8x 0.70 |       | 1'-10"  | 18  | 23     | 18  | 23     | 21  | 27     | 24  | 31     |
| Epoxy Coated Reinforcing Steel - Total (lbs.)           |                                     |       |         |     | 1,667  |     | 1,667  |     | 1,667  |     | 1,644  |
| Non-Coated Reinforcing Steel - Total (lbs.)             |                                     |       |         |     | 62     |     | 62     |     | 72     |     | 82     |

| Bill of Reinforcing Steel - One Abutment - 45 Deg. Skew |                                     |       |        |     |        |     |        |     |        |     |        |
|---------------------------------------------------------|-------------------------------------|-------|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| Bridge Length                                           |                                     |       | 20'-0" |     | 30'-0" |     | 40'-0" |     | 50'-0" |     |        |
| Bar                                                     | Location                            | Shape | Length | No. | Weight | No. | Weight | No. | Weight | No. | Weight |
| 8r2                                                     | Abutment Footing Longitudinal       |       | 45'-3" | 7   | 846    | 7   | 846    | 7   | 846    | 7   | 846    |
| 5s1                                                     | Abutment Footing Hoops              |       | 11'-0" | 42  | 482    | 42  | 482    | 42  | 482    | 42  | 482    |
| 5s2                                                     | Abutment Footing Hoops              |       | 13'-6" | 4   | 56     | 4   | 56     | 4   | 56     | 4   | 56     |
| 6t1                                                     | Footing to Slab Dowels              |       | 5'-0"  | 36  | 270    | 36  | 270    | 36  | 270    | 36  | 270    |
| 6t2                                                     | Footing to Slab Dowels              |       | 5'-7"  | 36  | 302    | 36  | 302    | 36  | 302    | 36  | 302    |
| #2                                                      | Pile Spiral                         |       | 38'-6" | 7   | 45     | 7   | 45     | 7   | 45     | 8   | 51     |
|                                                         | Spiral Spacers, L 7/8x7/8x1/8x 0.70 |       | 1'-10" | 21  | 27     | 21  | 27     | 21  | 27     | 24  | 31     |
| Epoxy Coated Reinforcing Steel - Total (lbs.)           |                                     |       |        |     | 1,956  |     | 1,956  |     | 1,956  |     | 1,956  |
| Non-Coated Reinforcing Steel - Total (lbs.)             |                                     |       |        |     | 72     |     | 72     |     | 72     |     | 82     |



| Estimated Quantities - One Abutment - 0 Deg. Skew |      |        |        |        |        |
|---------------------------------------------------|------|--------|--------|--------|--------|
| Location                                          | Unit | 20'-0" | 30'-0" | 40'-0" | 50'-0" |
| Bridge Length                                     |      |        |        |        |        |
| Structural Concrete (Bridge)                      | c.y. | 11.1   | 11.1   | 11.1   | 11.1   |
| Reinforcing Steel (Epoxy Coated)                  | lbs. | 1,507  | 1,519  | 1,507  | 1,473  |
| Reinforcing Steel (Non-Coated)                    | lbs. | 51     | 62     | 72     | 82     |
| Steel Piling HP 10x42                             | no.  | 5      | 6      | 7      | 8      |

| Estimated Quantities - One Abutment - 15 Deg. Skew |      |        |        |        |        |
|----------------------------------------------------|------|--------|--------|--------|--------|
| Location                                           | Unit | 20'-0" | 30'-0" | 40'-0" | 50'-0" |
| Bridge Length                                      |      |        |        |        |        |
| Structural Concrete (Bridge)                       | c.y. | 11.5   | 11.5   | 11.5   | 11.5   |
| Reinforcing Steel (Epoxy Coated)                   | lbs. | 1,528  | 1,540  | 1,528  | 1,528  |
| Reinforcing Steel (Non-Coated)                     | lbs. | 51     | 62     | 72     | 82     |
| Steel Piling HP 10x42                              | no.  | 5      | 6      | 7      | 8      |

| Estimated Quantities - One Abutment - 30 Deg. Skew |      |        |        |        |        |
|----------------------------------------------------|------|--------|--------|--------|--------|
| Location                                           | Unit | 20'-0" | 30'-0" | 40'-0" | 50'-0" |
| Bridge Length                                      |      |        |        |        |        |
| Structural Concrete (Bridge)                       | c.y. | 12.8   | 12.8   | 12.8   | 12.8   |
| Reinforcing Steel (Epoxy Coated)                   | lbs. | 1,667  | 1,667  | 1,667  | 1,644  |
| Reinforcing Steel (Non-Coated)                     | lbs. | 62     | 62     | 72     | 82     |
| Steel Piling HP 10x42                              | no.  | 6      | 6      | 7      | 8      |

| Estimated Quantities - One Abutment - 45 Deg. Skew |      |        |        |        |        |
|----------------------------------------------------|------|--------|--------|--------|--------|
| Location                                           | Unit | 20'-0" | 30'-0" | 40'-0" | 50'-0" |
| Bridge Length                                      |      |        |        |        |        |
| Structural Concrete (Bridge)                       | c.y. | 15.7   | 15.7   | 15.7   | 15.7   |
| Reinforcing Steel (Epoxy Coated)                   | lbs. | 1,956  | 1,956  | 1,956  | 1,956  |
| Reinforcing Steel (Non-Coated)                     | lbs. | 72     | 72     | 72     | 82     |
| Steel Piling HP 10x42                              | no.  | 7      | 7      | 7      | 8      |

|                                                     |                                                                                                                |                   |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------|
| Latest Revision Date<br>Approved By Bridge Engineer |                                                                                                                |                   |
|                                                     | Standard Design - 30'-0" Roadway, Single Span Bridge<br><b>Single Span Concrete Slab Bridges</b><br>July, 2025 |                   |
|                                                     | Integral Abutment Details                                                                                      | <b>J30S-19-25</b> |