



PID 116928, CLA/MOT-BH-FY26: QUANTITY CALCULATION

Calculated by: *Dan Grilliot, P.E., Date: 2/28/2025*

Checked by: *Lawton Gerlinger, P.E., Date: 4/4/2025*

Revised by: *Dan Grilliot, P.E., Date: 9/4/2025*

Roadway

1. Item 202-Pavement Removed (SY)
 - a. MOT-75-0614R: Four of areas of pavement removal assumed for the concrete patching of the parapet
 - b. 1 ft. x 11.5 ft. = 11.5 sq. ft = 12 sq. ft.
 - c. 1 ft. x 9.2 ft. = 9.2 sq. ft. = 10 sq. ft.
 - d. 1 ft. x 4.6 ft. = 4.6 sq. ft. = 5 sq. ft.
 - e. 1 ft. x 2.3 ft. = 2.3 sq. ft. = 3 sq. ft.
 - f. Total = 30 sq. ft. = 3.33 sq. yd = 4 sq. yd.
 - g. Total = 4 sq. yd.

Erosion Control

2. Item 832-Erosion Control (EA)
 - a. Considered Maintenance Project: 11 bridges x \$100/bridge = \$1,100

Pavement

3. Item 442-Asphalt Concrete Surface Course, 12.5mm, Type A (448), As Per Plan, PG70-22M (CY)
 - a. 4 sq. yd. x (3 in. x (1 yd./36 in.)) = 0.33 cu. yd. = round to 1 cu. yd.

Structure Repair (CLA-004-0667R)

4. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Lt. Parapet = 48 sq. ft.
 - b. Rt. Parapet = 33 sq. ft.
 - c. Total = 81 sq. ft.

Structure Repair (CLA-040-1380)

5. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Curb (median) = 17 sq. ft.

- b. Curb (Lt. side) = 2 sq. ft.
- c. Curb (Rt. side) = 11 sq. ft.
- d. Rear Abutment = 18 sq. ft.
- e. Fwd. Abutment = 25 sq. ft.
- f. Pier #1 = 3 sq. ft.
- g. Pier #2 = 4 sq. ft.
- h. Total = 80 sq. ft.

Structure Repair (CLA-068-0667L)

- 6. Item 202-Portions of Structure Removed, Over 20 Foot Span, As Per Plan (LS)
 - a. For partial deck edge removal.
 - b. Total = LUMP SUM
- 7. Item 202-Bridge Railing Removed for Reuse (FT)
 - a. Lt. Deck Edge Railing Removed for Partial Deck Edge Replacement
 - b. Total = 25 ft.
- 8. Item 509-Epoxy Coated Steel Reinforcement (LB)
 - a. Reinforcing Steel for Partial Deck Edge/Safety Curb Replacement
 - b. Total = 50 lbs
- 9. Item 509-Concrete Reinforcement, Replacement of Existing Concrete Reinforcement, As Per Plan (LB)
 - a. Total = 50 lbs
- 10. Item 511-Class QC2 Concrete, Superstructure (CY)
 - a. Deck edge/safety curb replacement = 2.9 sq. ft. x 18.75 ft = 54.375 cu. ft. = 2 cu. yd.
 - b. Total = 2 cu. yd.
- 11. Item 517-Railing Misc.: Type B Anchors (EACH)
 - a. 3 posts x 4 anchors/post = 12 each
 - b. Total = 12 each
- 12. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Curb (Lt. side) = 10 sq. ft.
 - b. Curb (Rt. side) = 6 sq. ft.
 - c. Rear Abutment = 5 sq. ft.
 - d. Fwd. Abutment = 32 sq. ft.
 - e. Total = 53 sq. ft.

Structure Repair (CLA-068-0667R)

- 13. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Curb (Lt. side) = 2 sq. ft.
 - b. Curb (Rt. side) = 7 sq. ft.
 - c. Rear Abutment = 10 sq. ft.
 - d. Fwd. Abutment = 35 sq. ft.
 - e. Total = 54 sq. ft.

Structure Repair (CLA-675-0061L)

- 14. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Forward Abutment = 24 sq. ft.

- b. Total = 24 sq. ft.

Structure Repair (MOT-035-1395L)

- 15. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Lt. Parapet = 101 sq. ft.
 - b. Rt. Parapet = 76 sq. ft.
 - c. Total = 177 sq. ft.

Structure Repair (MOT-035-1395R)

- 16. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Lt. Parapet = 56 sq. ft.
 - b. Rt. Parapet = 133 sq. ft.
 - c. Total = 189 sq. ft.

Structure Repair (MOT-070-1439)

- 17. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Lt. Parapet = 86 sq. ft.
 - b. Rt. Parapet = 110 sq. ft.
 - c. Rt. Curb = 3 sq. ft.
 - d. Total = 199 sq. ft.

Structure Repair (MOT-075-0614R)

- 18. Item 514-Field Painting, Misc.: Zinc Rich Primer (SF)
 - a. Underside of Deck Areas = 40 sq. ft. + 40 sq. ft. + 10 sq. ft. + 5 sq. ft. + 5 sq. ft. + 5 sq. ft. = 105 sq. ft.
- 19. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Lt. Parapet = 70 sq. ft.
 - b. Rt. Parapet = 50 sq. ft.
 - c. Pier #2 = 15 sq. ft.
 - d. Total = 135 sq. ft.

Structure Repair (MOT-075-0958)

- 20. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Rear Abutment = 249 sq. ft.
 - b. Fwd. Abutment = 38 sq. ft.
 - c. Fwd. Abutment Estimated Behind the Beams = 69 sq. ft.
 - d. Total = 356 sq. ft.

Structure Repair (MOT-675-0055L)

- 21. Item 519-Patching Concrete Structure, As Per Plan (SF)
 - a. Lt. Parapet = 17 sq. ft.
 - b. Rt. Parapet = 604 sq. ft.
 - c. Pier #1 = 2 sq. ft.
 - d. Pier #3 = 2 sq. ft.

- e. Total = 625 sq. ft.

Maintenance of Traffic

- 22. Item 614-Law Enforcement Officer with Patrol Car for Assistance (HOUR)
 - a. CLA-068-0667L = Estimated 48 hr. for setting traffic control zone with portable barrier for partial deck edge/safety curb replacement.
 - b. Total = 48 hr.
- 23. Item 614-Work Zone Impact Attenuator, 24" Wide Hazards, (Unidirectional) (EACH)
 - a. CLA-068-0667L = 1 each
 - b. Total = 1 each
- 24. Item 614-Detour Signing (LS)
 - a. Lump Sum (LS)
- 25. Item 614-Barrier Reflector, Type 1 (Unidirectional) (EACH)
 - a. CLA-068-0667L = 320 ft/50 ft. = 7 spaces = 8 each
 - b. Total = 8 each
- 26. Item 614-Object Marker, One Way (EACH)
 - a. Same as Item 614 Barrier Reflector, Type 1 (Unidirectional) = 8 each = total
- 27. Item 614-Work Zone Edge Line, Class I, 4". 740.06, Type I (MILE)
 - a. CLA-068-0667L = 0.20 mile
 - b. Total = 0.2 mile
- 28. Item 622-Portable Barrier, Unanchored (FT)
 - a. CLA-068-0667L = 320 ft.
 - b. Total = 320 ft.

Incidentals

- 29. Item 614-Maintaining Traffic (LS)
 - a. Lump Sum (LS)
- 30. Item 624-Mobilization (LS)
 - a. Lump Sum (LS)

END OF CALCULATIONS