THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

202-22900, APPROACH SLAB REMOVED, SY

Width =	40	ft
Length =	15	ft
No of Approaches =	2	
Total =	**134**	**SY**

507-00100, STEEL PILES HP10X42, FURNISHED, FT

No. of Piles =	9	
Length of Pile =	65	ft
No. of Piles =	9	
Length of Pile =	70	ft
Total =	**1215**	**FT**

507-00150, STEEL PILES HP10X42, DRIVEN, FT

No. of Piles =	9	
Length of Pile =	60	ft
No. of Piles =	9	
Length of Pile =	65	ft
Total =	**1125**	**FT**

507-00200, STEEL PILES HP12X53, FURNISHED, FT

No. of Piles =	16	
Length of Pile =	70	ft
Total =	**1120**	**FT**

507-00250, STEEL PILES HP12X53, DRIVEN, FT

No. of Piles =	16	
Length of Pile =	65	ft
Total =	**1040**	**FT**

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

507-71200, SPECIAL - PILE ENCASEMENT, FT

No. of Piles on Piers =	16	
Length of Pile Encasement =	8.75	ft
Total =	**140**	**FT**

509-10000, EPOXY COATED REINFORCING STEEL, LB

Rear Abutment =	3823	lb
Forward Abutment =	3823	lb
Superstructure =	36819	lb
Pier 1 & 2 =	3197	lb
Total =	**47662**	**LB**

511-33312, CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, CY

Slab Length =	57.67	ft
Slab Area =	48.30	sq ft
Slab Volume =	2785.30	cu ft
Abutment Rear Thickness =	2.25	ft
Point A Elevation =	994.08	ft
Point B Elevation =	995.25	ft
Point G Elevation =	991.08	ft
Abutment Rear Width =	43.00	ft
Approach Slab Width =	40.00	ft
Approach Slab Seat Thickness =	1.50	ft
Approach Slab Seat Width =	0.50	ft
Abutment Rear Volume =	346.85	cu ft
Approach Slab Volume =	30.00	cu ft
Abutment Rear Volume =	316.85	cu ft

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

Abutment Fwd Thickness =	2.25	ft
Point A Elevation =	994.94	ft
Point B Elevation =	996.09	ft
Point G Elevation =	991.94	ft
Abutment Fwd Width =	43.00	ft
Approach Slab Width =	40.00	ft
Approach Slab Seat Thickness =	1.50	ft
Approach Slab Seat Width =	0.50	ft
Abutment Fwd Volume =	345.88	cu ft
Approach Slab Volume =	30.00	cu ft
Abutment Fwd Volume =	315.88	cu ft
Abutments Total =	632.73	cu ft
Pier Width =	3.00	ft
Pier Depth =	2.00	ft
Pier Length =	38.67	ft
Radii of Pier End =	1.50	ft
Pier Volume =	228.14	cu ft
Pier Total =	456.27	cu ft
Total =	**144**	**CY**

511-43512, CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING, CY

Abutment Rear Thickness =	2.25	ft
Abutment Rear Length =	43.167	ft
Point G Elevation =	991.08	ft
Point E Elevation =	989.58	ft
Subtotal =	145.69	cu ft
Footing Rear Length =	59.25	ft
Footing Height =	3.00	ft
Footing Depth =	3.00	ft
Subtotal =	533.25	cu ft

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

Point A Elevation =	994.08	ft
Point E Elevation =	989.58	ft
Level Segment Length =	2.25	ft
Point C Elevation =	991.71	ft
Sloped Segment Length =	4.75	ft
Subtotal =	58.21	cu ft
Point B Elevation =	995.25	ft
Point E Elevation =	989.58	ft
Level Segment Length =	2.25	ft
Point D Elevation =	991.74	ft
Sloped Segment Length =	7	ft
Subtotal =	90.37	cu ft
Abutment Rear Total =	827.51	cu ft
Abutment Fwd Thickness =	2.25	ft
Abutment Fwd Length =	43.167	ft
Point G Elevation =	991.94	ft
Point E Elevation =	990.44	ft
Subtotal =	145.69	cu ft
Footing Fwd Length =	59.25	ft
Footing Height =	3.00	ft
Footing Depth =	3.00	ft
Subtotal =	533.25	cu ft
Point A Elevation =	994.94	ft
Point E Elevation =	990.44	ft
Level Segment Length =	2.33	ft
Point C Elevation =	992.57	ft
Sloped Segment Length =	4.67	ft
Subtotal =	58.43	cu ft

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

Point B Elevation =	996.09	ft	
Point E Elevation =	990.44	ft	
Level Segment Length =	2.25	ft	
Point D Elevation =	992.6	ft	
Sloped Segment Length =	7	ft	
Subtotal =	90.11	cu ft	
Abutment Fwd Total =	827.48	cu ft	
Total =	**62**	**CY**	

512-10100, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) , SY

Slab Edge Depth =	1.5	ft	*See BDM Figure 306-1
Overhang Width =	0.5	ft	
Slab Length =	57.67	ft	
No. of Sides =	2		
Subtotal =	230.67	sq ft	
Abutment/WW Face Area =	176.9	sf	
No. of Faces =	2		
Subtotal =	353.8	sf	
Wingwall Top Length =	22.92	ft	
Wingwall Exposed Width =	2.25	ft	
No. of Walls =	2		
Subtotal =	103.149	sf	
Wingwall Length =	22.922	ft	
Wingwall Exposed Height =	0.5	ft	
No. of Walls =	2		
Subtotal =	22.922	sf	
Total =	**80**	**SY**	*See BDM 306.1

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

512-33000, TYPE 2 WATERPROOFING, SY

Abut 1 Height of Stage Joint 1	2.42	ft
Abut 1 Height of Stage Joint 2	2.50	ft
Width of Waterproofing	3.00	ft
Abut 2 Height of Stage Joint 1	2.42	ft
Abut 2 Height of Stage Joint 2	2.50	ft
Width of Waterproofing	3.00	ft
Total =	**3**	**SY**

516-13200, 1/2" PREFORMED EXPANSION JOINT FILLER, SF

Bridge Width =	43.167	ft
Superstructure Height, Left =	3.00	ft
Superstructure Height, Right =	4.17	ft
Width =	0.75	ft
Total =	**76**	**SF**

516-13600, 1" PREFORMED EXPANSION JOINT FILLER, SF

Bridge Width =	43.167	ft
Beam Height =	3.00	ft
Beam Height =	4.17	ft
Width =	0.67	ft
No. =	2.00	
Approach Seat Width =	0.50	ft
Approach Slab Seat Thickness =	1.50	ft
No. =	4.00	
Total =	**71**	**SF**

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

516-25000, NYLON REINFORCED NEOPRENE SHEETING, SF

Abutment/WW Length =	46.167	ft
Neoprene Width =	3	ft
No. =	2.00	
Vertical Width =	3	ft
Vertical Height (Left) =	4.25	ft
Vertical Height (Right) =	5.42	ft
Total =	**336**	**SF**

517-70000, RAILING (TWIN STEEL TUBE), FT

CL First Post Length =	59.92	ft
Additional Length onto Appr =	4.917	ft
No. of Sides =	2	
Total =	**130**	**FT**

518-21200, POROUS BACKFILL WITH GEOTEXTILE FABRIC, CY

Backfill Area =	220	sq ft
Backfill Thickness =	2	ft
No. of Abutments =	2	
Total =	**33**	**CY**

518-22300, SPECIAL - STEEL DRIP STRIP, FT

Length of Drip Strip =	57.67	ft
No. of Drip Strips =	2	
Total =	**116**	**FT**

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

518-40000, 6" PERFORATED CORRUGATED PLASTIC PIPE, FT

Total Abutment Length =	60	ft
No. of Abutments =	2	
Total =	**120**	**FT**

518-40011, 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN, FT

Pipe Length =	33	
Total =	**33**	**FT**

526-25001, REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN, SY

Approach Width =	40	ft
Approach Length =	25	ft
No. of Appr =	2	
Total =	**223**	**SY**

526-90010, TYPE A INSTALLATION, FT

Width of Approach =	40	ft
No. of Approaches =	2	
Total =	**80**	**FT**

601-34200, ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER, CY

Area Rear Abut =	903.27	sq ft
Area Forward Abut =	993.79	sq ft
Rock Thickness =	2	ft
Total =	**141**	**CY**

THRASHER

BRIDGE NO. WAY-250-1727 **US 250 OVER LITTLE APPLE CREEK**	**PREPARED BY:** **RLC JAN-21**
SFN: 8504777 **ESTIMATED STRUCTURE QUANTITIES - CALCULATIONS**	**CHECKED BY:** **JWA JAN-21**

846-00110, POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM, CF

Joint Width =	40	ft	*See Standard Drawing AS-2-15
Joint Length=	1.67	ft	
Joint Thickness =	0.25	ft	
No. of Joints =	2		
Total =	**34**	**CF**	