



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: STRUCTURE REMOVED, OVER 20 FOOT SPAN

ITEM NO. 202E11002
 QUANTITY 1
 UNIT LUMP

Complete Structure Removal

	Width (ft)	Length (ft)	#	Area (SF)
Superstructure	26.00	40	1	1040.0
assume	\$20.00	SF	Total=	\$20,800.00

Retaining Wall Removal

	Area (SF)	Height (ft)	#	Volume (CY)
Retaining Wall Rear	26.80	13.16	1	13.1
Retaining Wall Rear	79.10	11.41	1	33.4
			Total=	46.5
assume	\$200.00	CY	Total=	\$9,297.92

Total Cost = \$30,097.92

Say = **\$30,000**



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: COFFERDAMS AND EXCAVATION BRACING

ITEM NO. 503E11100
QUANTITY 1
UNIT LUMP

Temporary Sheeting

Height (ft)	Length (ft)	#	Area (SF)
15	56	1	840
say		6 SF	\$5,040.00

Say = \$5,040



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: UNCLASSIFIED EXCAVATION

ITEM NO. 503E21300
 QUANTITY 1
 UNIT LUMP

	LENGTH (FT)	WIDTH (FT)	top el	bot el	HEIGHT (FT)	VOL (CF)	VOL (CY)
Rear Abutment	63	5.0	632.1	618.29	13.81	13361.49	494.87
Rear Wingwall 3	15.1	5.0	622.4	618.29	4.11	310.31	11.49
Rear Wingwall3	15.1	5.0	629.27	622.4	6.87	518.69	19.21
Rear Wingwall 4	19.9	5.0	622.5	618.29	4.21	418.90	15.51
Rear Wingwall 4	19.9	5.0	630.52	622.5	8.02	797.99	29.56
Forward Abutment	63	5.0	624.35	618.29	6.06	3644.09	134.97
Forward Wingwall 1	18.6	5.0	622.4	617.29	5.11	475.23	17.60
Forward Wingwall 1	18.6	5.0	630.02	622.4	7.62	708.66	26.25
Forward Wingwall 2	24.6	5.0	622.5	618.29	4.21	517.83	19.18
Forward Wingwall 2	24.6	5.0	630.27	622.5	7.77	955.71	35.40
						Abut Total=	804.03

TOTAL= 804 CU YD



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION:

ITEM NO. 505E11100
QUANTITY 1
UNIT LUMP



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: STEEL PILES HP 10X42, FURNISHED

ITEM NO. 507E00100
QUANTITY 1075
UNIT FT

	# PILES	LENGTH	TOTAL LENGTH (FT)
REAR	16	30.00	480.0
FORWARD	17	35.00	595.0
TOTAL=			1075.0

TOTAL = 1075 FT



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: STEEL PILES HP 10X42, DRIVEN

ITEM NO. 507E00150
QUANTITY 910
UNIT FT

	# PILES	LENGTH	TOTAL LENGTH (FT)
REAR	16	25.0	400.0
FORWARD	17	30.0	510.0
TOTAL=			910.0

TOTAL = 910 FT



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: STEEL POINTS OR SHOES

ITEM NO. 507E93300
QUANTITY 33
UNIT EACH

	# PILES	TOTAL (EACH)
REAR	16	16.0
FORWARD	17	17.0
TOTAL=		33.0

TOTAL = 33 EACH



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: EPOXY COATED REINFORCING STEEL

ITEM NO. 509E10000
QUANTITY 12564
UNIT LB

Total
Wingwalls= 5072
Footings= 7258
Headwalls= 234

TOTAL= 12564 LB



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING

ITEM NO. 511E46010
 QUANTITY 24
 UNIT CU YD

Wingwall

	Length	Ht (ft.)	Area (ft^2)	Width (ft.)	#	Total (CF)
Wingwall 1	14.79	8.23	121.72	1.00	1	121.72
Wingwall 1	2.88	9.75	28.03	1.00	1	28.03
Wingwall 2	19.79	8.48	167.82	1.00	1	167.82
Wingwall 2	2.79	9.75	27.20	1.00	1	27.20
Wingwall 3	11.85	7.48	88.64	1.00	1	88.64
Wingwall 3	2.25	9.75	21.94	1.00	1	21.94
Wingwall 4	16.71	8.73	145.88	1.00	1	145.88
Wingwall 4	2.25	9.75	21.94	1.00	1	21.94

WW Concrete Total= 623.17

TOTAL= 24.0 CU YD



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: CLASS QC1 CONCRETE, FOOTING

ITEM NO. 511E46510
 QUANTITY 78
 UNIT CU YD

culvert footing width= 3 ft
 culvert footing height= 3.5 ft

Footing Top EL= 621.79
 Footing Bottom EL.= 618.29

Footing

	Area (ft ²)	Ht (ft.)	Width (ft)	Len (ft)	#	Total (CF)
Rear Footing	288.01	3.50			1	1008.04
Forward Footing	306.5	3.50			1	1072.75
	287.14					

Abutment Total= 2080.79

TOTAL= 78.0 CU YD



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: CLASS QC1 CONCRETE, HEADWALL

ITEM NO. 511E46610
QUANTITY 2
UNIT CU YD

Headwall

	Area	Ht (ft.)	#	Total (CF)	
Headwall 1	36.21	0.50	2	36.21	1.34 CU YD

TOTAL= 2.0 CU YD



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ITEM NO. 512E10100
 QUANTITY 102
 UNIT SQ YD

		Sealing Ht (ft)	Width (ft)	Length (ft)	Width (ft)	Face Area (SF)	#	Area (SF)	Area (SY)
REAR	EADWALL/CULVERT	5.00	36.21				1	181.05	20.1
	WW#1	7.07		14.79		104.57	1	104.57	11.6
	WW#1	10.64		2.88		30.59	1	30.59	3.4
	WW#2	7.02		19.79		138.93	1	138.93	15.4
	WW#2	10.54		2.79		29.41	1	29.41	3.3
						Rear Abutment Total=		484.5	53.8
FORWARD	EADWALL/CULVERT	5.00	36.21				1	181.05	20.1
	WW#3	7.07		11.84		83.67	1	83.67	9.3
	WW#3	10.64		2.25		23.94	1	23.94	2.7
	WW#4	7.02		16.71		117.30	1	117.30	13.0
	WW#4	10.54		2.25		23.71	1	23.71	2.6
						For Abutment Total=		429.7	47.7
						Abutments Total=		914.2	101.58

TOTAL= 914.22 102.0 SQ YD



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: TYPE 2 WATERPROOFING

ITEM NO. 512E33000
QUANTITY 142
UNIT SQ YD

	Length (ft)	Height (ft)	#	Area (SF)
Culvert Sides	63	9.5	2	1197
	2	9.5	4	76
Total=				1273.00

TOTAL = 142 SQ YD



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: TYPE 3 WATERPROOFING

ITEM NO. 512E33010
QUANTITY 264
UNIT SQ YD

	Length (ft)	Height (ft)	#
Culvert Top	62	38.21	1

Area (SF)
2369.02

Total= 2369.02

TOTAL = 264 SQ YD



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: 1" PREFORMED EXPANSION JOINT FILLER

ITEM NO. 516E13600
 QUANTITY 44
 UNIT SQ FT

	Area (SF)	#
WW 1	10.75	1.00
WW2	10.75	1.00
WW 3	10.75	1.00
WW 4	10.75	1.00

	Area
	10.8
	10.8
	10.8
	10.8
TOTAL=	43.02

TOTAL = 44.0 SQ FT



Project: LAW-775-(15.45)(15.70)
 Bridge: LAW-775-1570
 ODOT

Date: 8/26/2020
 By: RG
 Checked: GTB
 Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: POROUS BACKFILL WITH GEOTEXTILE FABRIC

ITEM NO. 518E21200
 QUANTITY 25
 UNIT CU YD

Porous backfill behind wingwalls only

	<i>Area (SF)</i>	<i>Width</i>	<i>#</i>		
Wingwall 1	82.35	2	1	164.70	6.10
Wingwall 2	96.99	2	1	193.98	7.18
Wingwall 3	65.35	2	1	130.70	4.84
Wingwall 4	85.73	2	1	171.46	6.35
			ABUTMENTS TOTAL=		24.48

TOTAL = 25.0 CU YD



Project: LAW-775-(15.45)(15.70)
Bridge: LAW-775-1570
ODOT

Date: 8/26/2020
By: RG
Checked: GTB
Date: 8/26/2020

QUANTITY COMPUTATIONS

DESCRIPTION: CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT (34'-0" SPAN x 8'-0" RISE)

ITEM NO. 611E70000
QUANTITY 63
UNIT FT

Width (FT)	#	Total (FT)
63	1	63
		Total= 63

TOTAL = 63 FT