

Appendix C

Improvement Cost Estimates

US 9W Traffic Assessment
Bethlehem, NY

US 9W and Bender Lane

OPINION OF PROBABLE CONSTRUCTION COSTS					
ITEM	DESCRIPTION	UNIT	QUAN.	UNIT PRICE	AMOUNT
202.01	DISPOSAL OF BUILDINGS	LS	1	\$ 20,000.00	\$ 20,000.00
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	4,800	\$ 50.00	\$ 240,000.00
203.03	EMBANKMENT IN PLACE	CY	850	\$ 20.00	\$ 17,000.00
304.12	SUBBASE COURSE, TYPE 2	CY	2,400	\$ 50.00	\$ 120,000.00
402	TOP COURSE	TON	498	\$ 90.00	\$ 44,820.00
402	BINDER COURSE	TON	996	\$ 110.00	\$ 109,560.00
402	BASE COURSE	TON	1,992	\$ 100.00	\$ 199,200.00
407	TACK COAT	GAL	885	\$ 3.00	\$ 2,655.00
490.3	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY	2,000	\$ 3.00	\$ 6,000.00
608.0101	CONCRETE SIDEWALKS	CY	65	\$ 550.00	\$ 35,750.00
608.21	EMBEDDED DETECTABLE WARNING UNITS	SY	10	\$ 350.00	\$ 3,500.00
608	ASPHALT IMPRINT	SF	8,100	\$ 6.00	\$ 48,600.00
609	CONCRETE CURB	LF	3,400	\$ 50.00	\$ 170,000.00
610.1402	TOPSOIL - ROADSIDE	CY	250	\$ 50.00	\$ 12,500.00
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY	2,500	\$ 4.00	\$ 10,000.00
	LIGHTING / ELECTRICAL	LS	1	\$ 50,000.00	\$ 50,000.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1	\$ 82,000.00	\$ 82,000.00
625.01	SURVEY OPERATIONS	LS	1	\$ 26,000.00	\$ 26,000.00
	INCIDENTALS (10%)	LS	1	\$ 119,758.50	\$ 119,758.50
699.040001	MOBILIZATION (4%)	LS	1	\$ 52,693.74	\$ 52,693.74
SUBTOTAL					\$ 1,370,037.24
CONTINGENCY (20%)					\$ 274,007.45
SUBTOTAL (2017)					\$ 1,644,044.69
RIGHT-OF-WAY COSTS					\$ 300,000.00
DESIGN (10%)					\$ 164,404.47
CONSTRUCTION INSPECTION (9%)					\$ 147,964.02
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2017)					\$ 2,256,413.18
ESCALATION - 2.5%/YR (2026)					\$ 561,537.69
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2026)					\$ 2,817,950.86

US 9W Traffic Assessment
Bethlehem, NY

US 9W and Wemple Road

OPINION OF PROBABLE CONSTRUCTION COSTS					
ITEM	DESCRIPTION	UNIT	QUAN.	UNIT PRICE	AMOUNT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	1,200	\$ 50.00	\$ 60,000.00
304.12	SUBBASE COURSE, TYPE 2	CY	640	\$ 50.00	\$ 32,000.00
402	TOP COURSE	TON	320	\$ 90.00	\$ 28,800.00
402	BINDER COURSE	TON	320	\$ 110.00	\$ 35,200.00
402	BASE COURSE	TON	640	\$ 100.00	\$ 64,000.00
407	TACK COAT	GAL	380	\$ 3.00	\$ 1,140.00
490.3	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY	1,900	\$ 3.00	\$ 5,700.00
610.1402	TOPSOIL - ROADSIDE	CY	40	\$ 50.00	\$ 2,000.00
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY	400	\$ 4.00	\$ 1,600.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1	\$ 19,000.00	\$ 19,000.00
625.01	SURVEY OPERATIONS	LS	1	\$ 8,000.00	\$ 8,000.00
	TRAFFIC SIGNALS	LS	1	\$ 175,000.00	\$ 175,000.00
	INCIDENTALS (10%)	LS	1	\$ 43,244.00	\$ 43,244.00
699.040001	MOBILIZATION (4%)	LS	1	\$ 19,027.36	\$ 19,027.36
SUBTOTAL					\$ 494,711.36
CONTINGENCY (20%)					\$ 98,942.27
SUBTOTAL (2017)					\$ 593,653.63
RIGHT-OF-WAY COSTS					\$ 40,000.00
DESIGN (10%)					\$ 59,365.36
CONSTRUCTION INSPECTION (9%)					\$ 53,428.83
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2017)					\$ 746,447.82
ESCALATION - 2.5%/YR (2026)					\$ 185,763.22
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2026)					\$ 932,211.04

US 9W Traffic Assessment
Bethlehem, NY

US 9W and Jericho Road

OPINION OF PROBABLE CONSTRUCTION COSTS					
ITEM	DESCRIPTION	UNIT	QUAN.	UNIT PRICE	AMOUNT
206.03	CONDUIT EXCAVATION & BACKFILL	LF	750	\$ 20.00	\$ 15,000.00
680.5001	POLE EXCAVATION AND FOUNDATION	CY	10	\$ 1,200.00	\$ 12,000.00
680.5002	CONTROLLER FOUNDATION	EA	1	\$ 1,000.00	\$ 1,000.00
680.510501	PULLBOX	EA	8	\$ 1,100.00	\$ 8,800.00
680.52	CONDUIT	LF	750	\$ 20.00	\$ 15,000.00
680.60	TRAFFIC SIGNAL POLE	EA	2	\$ 10,000.00	\$ 20,000.00
680.80	CONTROLLER & CABINET	EA	1	\$ 20,000.00	\$ 20,000.00
680.810	SIGNAL HEADS	EA	24	\$ 350.00	\$ 8,400.00
680.81	SIGNAL BRACKETS	EA	8	\$ 250.00	\$ 2,000.00
680.819	SIGNAL BACKPLATES	EA	8	\$ 200.00	\$ 1,600.00
680.73	SIGNAL CABLE	LF	1,000	\$ 1.00	\$ 1,000.00
	VEHICLE DETECTION	EA	5	\$ 1,750.00	\$ 8,750.00
	INCIDENTALS (10%)	LS	1	\$ 11,355.00	\$ 11,355.00
699.040001	MOBILIZATION (4%)	LS	1	\$ 4,996.20	\$ 4,996.20
SUBTOTAL					\$ 129,901.20
CONTINGENCY (25%)					\$ 32,475.30
SUBTOTAL (2017)					\$ 162,376.50
RIGHT-OF-WAY COSTS					\$ -
DESIGN (10%)					\$ 16,237.65
CONSTRUCTION INSPECTION (9%)					\$ 14,613.89
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2017)					\$ 193,228.04
ESCALATION - 2.5%/YR (2026)					\$ 48,087.30
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2026)					\$ 241,315.34

US 9W Traffic Assessment
Bethlehem, NY

Feura Bush Road and Elsmere Avenue

OPINION OF PROBABLE CONSTRUCTION COSTS					
ITEM	DESCRIPTION	UNIT	QUAN.	UNIT PRICE	AMOUNT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	2,100	\$ 50.00	\$ 105,000.00
203.03	EMBANKMENT IN PLACE	CY	200	\$ 20.00	\$ 4,000.00
304.12	SUBBASE COURSE, TYPE 2	CY	870	\$ 50.00	\$ 43,500.00
402	TOP COURSE	TON	560	\$ 75.00	\$ 42,000.00
402	BINDER COURSE	TON	560	\$ 110.00	\$ 61,600.00
402	BASE COURSE	TON	1,120	\$ 100.00	\$ 112,000.00
407	TACK COAT	GAL	635	\$ 3.00	\$ 1,905.00
490.3	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY	2,700	\$ 3.00	\$ 8,100.00
608.0101	CONCRETE SIDEWALKS	CY	33	\$ 550.00	\$ 18,150.00
608.21	EMBEDDED DETECTABLE WARNING UNITS	SY	5	\$ 350.00	\$ 1,750.00
609	CONCRETE CURB	LF	650	\$ 40.00	\$ 26,000.00
610.1402	TOPSOIL - ROADSIDE	CY	100	\$ 50.00	\$ 5,000.00
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY	900	\$ 4.00	\$ 3,600.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1	\$ 35,000.00	\$ 35,000.00
625.01	SURVEY OPERATIONS	LS	1	\$ 13,000.00	\$ 13,000.00
	TRAFFIC SIGNALS	LS	1	\$ 175,000.00	\$ 175,000.00
	INCIDENTALS (10%)	LS	1	\$ 65,560.50	\$ 65,560.50
699.040001	MOBILIZATION (4%)	LS	1	\$ 28,846.62	\$ 28,846.62
SUBTOTAL					\$ 750,012.12
CONTINGENCY (20%)					\$ 150,002.42
SUBTOTAL (2017)					\$ 900,014.54
RIGHT-OF-WAY COSTS					\$ 50,000.00
DESIGN (10%)					\$ 90,001.45
CONSTRUCTION INSPECTION (9%)					\$ 81,001.31
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2017)					\$ 1,121,017.31
ESCALATION - 2.5%/YR (2026)					\$ 278,979.70
TOTAL OPINION OF PROBABLE IMPROVEMENT COSTS (2026)					\$ 1,399,997.00