

**NEW AVENUE BIKEWAY**

The City of Takoma Park and The Metropolitan Washington Council of Governments  
 Preferred - New Pedestrian Bridge over Sligo Creek

**30% Construction Estimate**

Rummel, Klepper & Kahl, LLP  
 Comm. No. 16217

Date: April 2017

SHA CCS No.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL ESTIMATE
110100	CLEARING & GRUBBING	1	L.S.	\$20,000.00	\$20,000.00
114010	5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MAKING PAINT	600	L.F.	\$0.50	\$300.00
114035	12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	1,000	L.F.	\$2.25	\$2,250.00
114045	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	250	L.F.	\$3.25	\$812.50
120500	MAINTENANCE OF TRAFFIC	1	L.S.	\$100,000.00	\$100,000.00
120610	ARROW PANEL	120	UD	\$25.00	\$3,000.00
120625	TEMPORARY TRAFFIC SIGNS HIGH PERFORMANCE WIDE ANGLE RETOREFLECTIVE SHEETING	1,250	S.F.	\$14.00	\$17,500.00
120719	WOODEN BARRICADE FOR PEDESTRIAN CONTROL	20	L.F.	\$40.00	\$800.00
120784	TEMPORARY ORANGE CONSTRUCTION FENCE	850	L.F.	\$3.50	\$2,975.00
120820	DRUMS FOR MAINTENANCE OF TRAFFIC	300	EA.	\$55.00	\$16,500.00
120860	PORTABLE VARIABLE MESSAGE SIGN	150	UD	\$50.00	\$7,500.00
130840	CONSTRUCTION STAKEOUT	1	LS	\$25,000.00	\$25,000.00
130850	MOBILIZATION	1	LS	\$160,000.00	\$160,000.00
131000	CPM PROJECT SCHEDULE	1	LS	\$4,000.00	\$4,000.00
199000	CONES FOR MAINTENANCE OF TRAFFIC	50	EA.	\$15.00	\$750.00
201030	CLASS 1 EXCAVATION	4,105	C.Y.	\$50.00	\$205,250.00
202065	COMMON BORROW	1,000	C.Y.	\$29.00	\$29,000.00
203030	TEST PIT EXCAVATION	50	C.Y.	\$150.00	\$7,500.00
302418	18 INCH REINFORCED CONCRETE PIPE, CLASS IV	255	LF	\$125.00	\$31,875.00
302436	36 INCH REINFORCED CONCRETE PIPE, CLASS IV	66	LF	\$175.00	\$11,550.00
302524	24 INCH REINFORCED CONCRETE PIPE, CLASS V	65	LF	\$200.00	\$13,000.00
354436	STANDARD TYPE C ENDWALL FOR 36 INCH PIPE	2	EA	\$4,000.00	\$8,000.00
374005	STANDARD 5 FT COG INLET	1	EA	\$4,375.00	\$4,375.00
374100	5 FOOT COG/COS OPENING	5	EA	\$3,500.00	\$17,500.00
378164	STANDARD SINGLE OPENING TYPE K INLET OPEN END GRATE NON TRAFFIC AREAS-MINIMUM DEPTH	3	EA	\$4,000.00	\$12,000.00
380120	STANDARD YARD INLET - MINIMUM DEPTH	4	EA	\$2,000.00	\$8,000.00
380600	48 INCH DIAMETER MANHOLE FOR 12 INCH TO 24 INCH PIPES-MINIMUM DEPTH	3	EA	\$4,500.00	\$13,500.00
387106	6 INCH PERFORATED CIRCULAR PIPE LONGITUDINAL UNDERDRAIN	350	LF	\$20.00	\$7,000.00
390321	CLASS 1 RIPRAP FOR SLOPE AND CHANNEL PROTECTION	75	SY	\$100.00	\$7,500.00
390345	3/4 INCH TO 1 1/2 INCH STONE FOR SEDIMENT CONTROL	150	TN	\$40.00	\$6,000.00
390350	2 INCH TO 3 INCH STONE FOR SEDIMENT CONTROL	635	TN	\$40.00	\$25,400.00
390524	GEOTEXTILE CLASS SE	710	SY	\$5.00	\$3,550.00
390540	NO. 7 AGGREGATE FOR SWM FACILITIES	20	CY	\$65.00	\$1,300.00
390630	NO. 57 AGGREGATE FOR SWM FACILITIES	340	TN	\$65.00	\$22,100.00
390650	COARSE SAND FOR SWM FACILITIES	500	CY	\$90.00	\$45,000.00
390660	BIORETENTION SOIL MIX	120	CY	\$100.00	\$12,000.00
390665	STORMWATER MANAGEMENT FACILITY AS-BUILT CERTIFICATION	5	EA	\$5,000.00	\$25,000.00
390670	ACCESS ROAD WITH CELLULAR CONFINEMENT LOAD SUPPORT SYSTEM	15	CY	\$95.00	\$1,425.00
400000	RETAINING WALL 1	1	LS	\$40,000.00	\$40,000.00
400000	RETAINING WALL 2	1	LS	\$175,000.00	\$175,000.00
400000	RETAINING WALL 3	1	LS	\$110,000.00	\$110,000.00
400000	RETAINING WALL 4	1	LS	\$110,000.00	\$110,000.00
400000	PRE-ENGINEERED TRUSS BRIDGE	1	LS	\$88,000.00	\$88,000.00
410005	MAINTENANCE OF STREAM FLOW	1	LS	\$30,000.00	\$30,000.00
417105	CLASS 3 EXCAVATION	540	CY	\$30.00	\$16,200.00
431105	SUBSTRUCTURE CONCRETE FOR BRIDGE	145	CY	\$1,125.00	\$163,125.00
500000	5 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	3600	LF	\$1.10	\$3,960.00
500000	GREEN BICYCLE PAVEMENT MARKING - MMA	8100	SF	\$11.00	\$89,100.00
500000	2" PERVIOUS ASPHALT MIX 12.5 MM FOR SURFACE	150	TON	\$140.00	\$21,000.00
500000	2" PERVIOUS ASPHALT MIX 19.0 MM FOR BASE	150	TON	\$150.00	\$22,500.00
500000	8 INCH JOINTED PLAIN PORTLAND CEMENT CONCRETE MIX 9	120	SY	\$75.00	\$9,000.00
504500	SUPERPAVE ASPHALT MIX 9.5MM FOR SURFACE, PG 64S-22, LEVEL 2	80	TON	\$170.00	\$13,600.00
504538	SUPERPAVE ASPHALT MIX 12.5 MM FOR SURFACE, HDFV, PG 64s-22, LEVEL 2	100	TON	\$100.00	\$10,000.00
504560	SUPERPAVE ASPHALT MIX 19.0 MM FOR BASE, PG 64s-22, LEVEL 2	780	TON	\$100.00	\$78,000.00
520111	4" GRADED AGGREGATE BASE COURSE	905	SY	\$8.00	\$7,240.00
520113	6" GRADED AGGREGATE BASE COURSE	4120	SY	\$14.00	\$57,680.00
561118	8 INCH PORTLAND CEMENT CONCRETE PAVEMENT FOR DRIVEWAY MIX 9	155	SY	\$110.00	\$17,050.00
585600	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	300	SF	\$20.00	\$6,000.00
585604	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	1000	LF	\$12.00	\$12,000.00
585621	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	250	LF	\$15.00	\$3,750.00

**NEW AVENUE BIKEWAY**

The City of Takoma Park and The Metropolitan Washington Council of Governments  
 Preferred - New Pedestrian Bridge over Sligo Creek

**30% Construction Estimate**

Rummel, Klepper & Kahl, LLP  
 Comm. No. 16217

Date: April 2017

SHA CCS No.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL ESTIMATE
600000	REMOVE AND RELOCATE EXISTING FENCE	325	LF	\$20.00	\$6,500.00
634204	TYPE A CURB ANY HEIGHT OR DEPTH	475	LF	\$30.00	\$14,250.00
634312	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	3,625	LF	\$32.00	\$116,000.00
655105	5 INCH CONCRETE SIDEWALK	9375	SF	\$6.00	\$56,250.00
655120	DETECTABLE WARNING SURFACE FOR CURB RAMPS	410	SF	\$34.00	\$13,940.00
662325	REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM	425	LF	\$4.00	\$1,700.00
662326	REMOVE EXISTING END TREATMENT	2	EA	\$600.00	\$1,200.00
715015	SHREDDED HARDWOOD BARK MULCHING 3 INCH DEPTH	170	S.Y.	\$8.00	\$1,360.00
704345	PLACING FURNISHED TOPSOIL 4 INCH DEPTH	1,200	S.Y.	\$12.00	\$14,400.00
705565	REFERTILIZING	1,200	S.Y.	\$1.00	\$1,200.00
705412	TEMPORARY MULCH	2,350	S.Y.	\$1.00	\$2,350.00
708220	TURFGRASS SOD ESTABLISHMENT	1,200	S.Y.	\$6.00	\$7,200.00
800000	SMALL GROUND MOUNTED SIGNS AND SUPPORTS	35	EA	\$750.00	\$26,250.00
800000	TRAFFIC SIGNAL RECONSTRUCTION WITH APS/CPS - MD 650 AT LARCH	1	EA	\$250,000.00	\$250,000.00
800000	TRAFFIC SIGNAL MINOR MODIFICATION WITH APS/CPS - MD 650 AT SLIGO CREEK PKWY	1	EA	\$15,000.00	\$15,000.00
800000	TRAFFIC SIGNAL MODIFICATION WITH APS/CPS - MD 650 AT GLENSIDE DR & ERSKINE ST	1	EA	\$65,000.00	\$65,000.00
800000	TRAFFIC SIGNAL MODIFICATION WITH APS/CPS - MD 650 AT MERWOOD DR	1	EA	\$30,000.00	\$30,000.00
800000	TRAFFIC SIGNAL MODIFICATION WITH APS/CPS - MD 650 AT HOLTON LANE	1	EA	\$45,000.00	\$45,000.00
800000	LIGHTING - 16' POLE, ARM, FOUNDATION, CABLES AND EQUIPMENT	14	EA	\$7,000.00	\$98,000.00
<b>UTILITY RELOCATIONS (See Assumptions/ Exclusions Note 3)</b>					<b>\$210,000.00</b>
<b>SUB-TOTAL</b>					<b>\$2,938,017.50</b>
CONTINGENCY (20%)					\$587,603.50
<b>NEAT CONSTRUCTION COST</b>					<b>\$3,526,000.00</b>

SUBTOTALS	
Category 1	\$361,387.50
Category 2	\$241,750.00
Category 3	\$276,075.00
Category 4	\$732,325.00
Category 5	\$350,880.00
Category 6	\$209,840.00
Category 7	\$26,510.00
Category 8	\$529,250.00

**Assumptions / Exclusions:**

- Retaining Wall Costs Provided are for CIP Concrete.
  - Underdrain for pervious asphalt path is excluded. Assumes infiltration is viable, subject to testing.
  - Utility impacts and costs will need to be verified and are dependent on prior rights determination.
- Known impacts include:

Utility Pole Relocation Sta. 103+50 @ \$15K/ea.  
 Utility Pole Relocation Sta. 106+50 @ \$15K/ea.  
 Utility Pole Relocation Sta. 107+50 @ \$15K/ea.  
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 Utility Pole Relocation Sta. 128+40 @ \$15K/ea.  
 Utility Pole Relocation Sta. 129+25 @ \$15K/ea.  
 Utility Pole Relocation Sta. 130+50 @ \$15K/ea.

Utility Pole Relocation Sta. 132+50 @ \$15K/ea.  
 Guy Wire Relocation Sta. 115+00 @ \$4K/ea.  
 Guy Wire Relocation Sta. 116+25 @ \$4K/ea.  
 Guy Wire Relocation Sta. 127+40 @ \$4K/ea.  
 Electric Meter Relocation. 122+00 @\$8K  
 Utility Vault Relocation 137+60 @ \$10K/ea.  
 Convert 16 Leased Lights to LED @ \$2K/ea.

**NEW AVENUE BIKEWAY**

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 Alternative A - Modification to MD 650 Bridge over Sligo Creek

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390670	ACCESS ROAD WITH CELLULAR CONFINEMENT LOAD SUPPORT SYSTEM	15	CY	\$95.00	\$1,425.00
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400000	RETAINING WALL 2	1	LS	\$175,000.00	\$175,000.00
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400000	RETAINING WALL 4	1	LS	\$110,000.00	\$110,000.00
410005	MAINTENANCE OF STREAM FLOW	1	LS	\$30,000.00	\$30,000.00
410122	REMOVE EXISTING BRIDGE RAILINGS	70	LF	\$15.00	\$1,050.00
410165	REMOVING AND RE-ERECTING EXISTING STRUCTURAL STEEL	1	LS	\$10,000.00	\$10,000.00
410200	REMOVAL OF PORTIONS OF EXISTING STRUCTURE	170	CY	\$750.00	\$127,500.00
417105	CLASS 3 EXCAVATION	220	CY	\$30.00	\$6,600.00
431105	SUBSTRUCTURE CONCRETE FOR BRIDGE	218	CY	\$1,125.00	\$245,250.00
433150	SUPERSTRUCTURE CONCRETE FOR BRIDGE	60	CY	\$1,125.00	\$67,500.00
456136	EPOXY COATED REINFORCEMENT IN SUPERSTRUCTURE	7100	LB	\$2.50	\$17,750.00
459105	FABRICATED STRUCTURAL STEEL	5750	LB	\$2.00	\$11,500.00
472125	METAL RAILING TWO STRAND	70	LF	\$25.00	\$1,750.00
500000	5 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	3600	LF	\$1.10	\$3,960.00
500000	GREEN BICYCLE PAVEMENT MARKING - MMA	8100	SF	\$11.00	\$89,100.00
500000	2" PERVIOUS ASPHALT MIX 12.5 MM FOR SURFACE	150	TON	\$140.00	\$21,000.00
500000	2" PERVIOUS ASPHALT MIX 19.00 MM FOR BASE	150	TON	\$150.00	\$22,500.00
500000	8 INCH JOINTED PLAIN PORTLAND CEMENT CONCRETE MIX 9	120	SY	\$75.00	\$9,000.00
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Alternative A - Modification to MD 650 Bridge over Sligo Creek

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585621	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	250	LF	\$15.00	\$3,750.00
600000	REMOVE AND RELOCATE EXISTING FENCE	325	LF	\$20.00	\$6,500.00
600000	TRAFFIC BARRIER W BEAM USING 6 FOOT POST WITH HANDRAIL	140	LF	\$50.00	\$7,000.00
634204	TYPE A CURB ANY HEIGHT OR DEPTH	475	LF	\$30.00	\$14,250.00
634312	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	3625	LF	\$32.00	\$116,000.00
655105	5 INCH CONCRETE SIDEWALK	9375	SF	\$6.00	\$56,250.00
655120	DETECTABLE WARNING SURFACE FOR CURB RAMPS	410	SF	\$34.00	\$13,940.00
661510	TYPE C TRAFFIC BARRIER END TREATMENT	1	EA	\$2,500.00	\$2,500.00
661540	TYPE K TRAFFIC BARRIER END TREATMENT, ANY OPTION	1	EA	\$1,000.00	\$1,000.00
662325	REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM	545	LF	\$4.00	\$2,180.00
662326	REMOVE EXISTING END TREATMENT	4	EA	\$600.00	\$2,400.00
715015	SHREDDED HARDWOOD BARK MULCHING 3 INCH DEPTH	170	S.Y.	\$8.00	\$1,360.00
704345	PLACING FURNISHED TOPSOIL 4 INCH DEPTH	1200	S.Y.	\$12.00	\$14,400.00
705565	REFERTILIZING	1200	S.Y.	\$1.00	\$1,200.00
705412	TEMPORARY MULCH	2350	S.Y.	\$1.00	\$2,350.00
708220	TURFGRASS SOD ESTABLISHMENT	1200	S.Y.	\$6.00	\$7,200.00
800000	SMALL GROUND MOUNTED SIGNS AND SUPPORTS	35	EA	\$750.00	\$26,250.00
800000	TRAFFIC SIGNAL RECONSTRUCTION WITH APS/CPS - MD 650 AT LARCH	1	EA	\$250,000.00	\$250,000.00
800000	TRAFFIC SIGNAL MINOR MODIFICATION WITH APS/CPS - MD 650 AT SLIGO CREEK PKWY	1	EA	\$15,000.00	\$15,000.00
800000	TRAFFIC SIGNAL MODIFICATION WITH APS/CPS - MD 650 AT GLENSIDE DR & ERSKINE ST	1	EA	\$65,000.00	\$65,000.00
800000	TRAFFIC SIGNAL MODIFICATION WITH APS/CPS - MD 650 AT MERWOOD DR	1	EA	\$30,000.00	\$30,000.00
800000	TRAFFIC SIGNAL MODIFICATION WITH APS/CPS - MD 650 AT HOLTON LANE	1	EA	\$45,000.00	\$45,000.00
800000	LIGHTING - 16' POLE, ARM, FOUNDATION, CABLES AND EQUIPMENT	14	EA	\$7,000.00	\$98,000.00
UTILITY RELOCATIONS (See Assumptions/ Exclusions Note 3)					\$210,000.00
<b>SUB-TOTAL</b>					<b>\$3,186,772.50</b>
CONTINGENCY (20%)					\$637,354.50
<b>NEAT CONSTRUCTION COST</b>					<b>\$3,825,000.00</b>

SUBTOTALS	
Category 1	\$376,387.50
Category 2	\$241,750.00
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 Utility Pole Relocation Sta. 107+50 @ \$15K/ea.  
 Utility Pole Relocation Sta. 108+75 @ \$15K/ea.  
 Utility Pole Relocation Sta. 110+00 @ \$15K/ea.  
 Utility Pole Relocation Sta. 128+40 @ \$15K/ea.  
 Utility Pole Relocation Sta. 129+25 @ \$15K/ea.  
 Utility Pole Relocation Sta. 130+50 @ \$15K/ea.

Utility Pole Relocation Sta. 132+50 @ \$15K/ea.  
 Guy Wire Relocation Sta. 115+00 @ \$4K/ea.  
 Guy Wire Relocation Sta. 116+25 @ \$4K/ea.  
 Guy Wire Relocation Sta. 124+90 @ \$4K/ea.  
 Guy Wire Relocation Sta. 127+40 @ \$4K/ea.  
 Electric Meter Relocation. 122+00 @\$8K  
 Utility Vault Relocation 137+60 @ \$10K/ea.  
 Convert 16 Leased Lights to LED @ \$2K/ea.