

Alternative A-1

		7 1100	mative / t			
Price	Item #	Description	Units	Est. Quantity	Unit Price	Extended Amount
VDOT	0100	MOBILIZATION	LS	1.00	\$3,312,142.60	\$3,312,142.60
VDOT	00101	CONST. SURVEYING	LS	1.00	\$649,929.23	\$649,929.23
VDOT	00110	CLEARING AND GRUBBING	ACRE	0.65	\$24,591.72	\$15,984.62
			Earthwork			
		REGULAR EXCATION (MSE WALLS)	LS	1.00		\$1,000,000.00
			Bridge			
		Single Peir Structure	SF	31515	\$325.00	\$10,242,375.00
		Double Peir Substructure	SF	235575	\$130.00	\$30,624,750.00
		Double Peir Superstructure	SF	57585	\$195.00	\$11,229,075.00
			Roadway			
VDOT	16395	ASPH. CONC.BASE CR. TY. BM-25.0A	TON	579.53	\$78.93	\$45,742.07
VDOT	16242	AGGR. BASE MAT'L NO. 21-B	TON	598.19	\$27.72	\$16,581.72
VDOT	16373	INTERMEDIATE MIX IM-19.0A	TON	130.63	\$101.31	\$13,234.24
VDOT	16335	ASPHALT CONCRETE TY. SM-9.5A	TON	139.04	\$72.61	\$10,095.69
VDOT	68315	Milling 1.5" Depth	SY	497.78	\$55.00	\$27,377.78
VDOT	13220	HYDR. CEMENT CONC. SIDEWALK 4"	SY	1490.00	\$36.94	\$55,040.60
VDOT	14120	REMOVAL OF COMB. CURB AND GUTTER	LF	2700.00	\$9.74	\$26,298.00
VDOT	14440	SAW CUT	LF	2700.00	\$3.00	\$8,100.00
VDOT	21020	MEDIAN STRIP MS-1	SY	3350.00	\$147.35	\$493,622.50
VDOT	14416	STD. CURB CG-6	LF	2700.00	\$54.00	\$145,800.00
		MSE (Mechanically Stable Earth Walls)	SF	12600.00	\$100.00	\$1,260,000.00
VDOT	27505	Silt Fence	LF	8500.00	\$2.83	\$24,055.00
VDOT	13502	SI-1 - SIGN ISLAND	SY	130.00	\$77.72	\$10,103.60
PCES		BRIDGE SIGN	LS	1.00		\$212,272.41
			Drainage			
VDOT	01246	24" STORM SEWER PIPE	LF	4224.00	\$65.00	\$274,560.00
VDOT	06819	DROP INLET DI-3B, L=8'	EA	30.00	\$4,096.79	\$122,903.70
		STORMWATER FACILITIES	LS	1.00		\$1,000,000.00
			Traffic			
PCES		ILLUMINATION	LS	1.00		\$518,888.12
		SIGNALIZATION	LS	1.00		\$800,000.00
			tenance of Traffic			
		МОТ	LS	1.00		\$6,000,000.00
			Utilities			
PCES		UTILITIES (CONSTR.)	LS	1.00		\$816,062.72
		_	Incidentals			
		Incidentals (20%)	LS	1.00	\$13,128,570.40	\$13,128,570.40
				_	SUBTOTAL:	\$82,083,565.01

Contingency (20%) \$16,416,713.00 CEI (20%) \$16,416,713.00 TOTAL \$114,916,991.01





UPC: ****

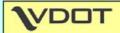
UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL **Transmission** Computed RW or Type No Entry Number Rural Percent Total to RW to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project Computed RW H-Conc/Steel 2 Rural 100% \$301,308 \$301,308 \$0 В Computed RW Rural 100% \$0 \$0 \$0 С Computed RW Rural 100% \$0 \$0 \$0 Computed Rural 100% \$301,308 \$301,308 \$0 **Distribution - Aerial** No Entry to RW Computed RW or Туре Number Rural Percent Total to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project Computed RW Three Phase Rural 100% \$66 531 \$66,531 \$0 15 Computed RW Dual Three Phase Rural 100% \$228,690 \$228,690 \$0 G Computed RW Rural 100% \$0 \$0 \$0 Н Computed RW Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 Rural 100% \$295,221 \$295,221 \$0 **Distribution - Underground - by Linear Foot** Computed RW or Type No Entry Total Percent Total to RW to Const or User Const of Service Required Length(ft) VDOT Cost Project Project \$699,909 Computed RW Three Phase 3,420 100% \$699,909 \$0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed 100% \$0 \$699,909 \$699,909 \$0 Distribution - Underground - by Pole Equivalent RW or No Entry to RW Computed Equivalent Type Equiv. # Percent Total to Const or User Const of Pole Required of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Q Computed RW 100% \$0 \$0 \$0 100% \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** RW or No Entry to RW Computed Total Percent Total to Const Type Project \$0 or User Const of Service Required Length(ft) VDOT Cost Project \$0 Computed Computed RW RW 100% 100% \$0 \$0 \$0 \$0 \$0 **\$**0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Computed Number Percent Total to Const Project of Manhole Required of MH's VDOT or User Cost Project Const U \$0 \$0 \$0 Computed RW RW 100% 100% \$0 \$0 \$0 Computed W RW 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 Computed \$0 Misc. Electrical Costs **Total to Const** TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$1,296,43 \$1,296,438 **\$**0 Misc. Electrical Costs Charged to Const. Project: Z

D. ILLEIT	IONE							
Aerial - Copper Wir	۵							
Computed RW or	•	Type of Cable	No Entry	Number	Percent	Total	to RW	to C
or User Const		(Pair Cable)	Required	of Poles	VDOT	Cost	Project	Pr
Computed RW	1 F	900	T to quirou	21	100%	\$106.302	\$106,302	
Computed RW		600		10	100%	\$47,002	\$47,002	
Computed RW					100%	\$0	\$0	
Computed RW					100%	\$0	\$0	
						\$153,304	\$153,304	
Aerial - Fiber Optic Computed RW or		Time of Cable	Na Fata.	Number	Percent	Total	to RW	to (
Computed RW or or User Const		Type of Cable (Optical Fiber)	No Entry Required	of Poles	VDOT	Cost	Project	P
Computed RW	1 F	144	Required	42	100%	\$516,340	\$516.340	
Computed RW	1 -	177		72	100%	\$0	\$0	
Computed RW					100%	\$0	\$0	
Computed RW					100%	\$0	\$0	
- Timpatoa Titt			<u> </u>		1,0070	\$516,340	\$516,340	
Underground - Cop	per Wire							
Computed RW or		Type of Cable	No Entry	Total	Percent	Total	to RW	to
or User Const	, <u> </u>	(Pair Cable)	Required	Length(ft)	VDOT	Cost	Project	Р
Computed RW	_				100% 100%	\$0	\$0 \$0	
Computed RW Computed RW			1	-	100%	\$0 \$0	\$0 \$0	
Computed RW Computed RW			1	 	100%	\$0 \$0	\$0 \$0	
Compact 100			<u> </u>		15076	\$0	\$0	
Underground - Fibe	r Optic							
Computed RW or		Type of Cable	No Entry	Total	Percent	Total	to RW	to (
or User Const		(Optical Fiber)	Required	Length(ft)	VDOT	Cost	Project	Pi
Computed RW	\bot				100%	\$0	\$0	
Computed RW	\bot				100%	\$0	\$0	
Computed RW					100%	\$0	\$0	
Computed RW					100%	\$0 \$0	\$0 \$0	
Underground - Cop	per Wire -	- In Conduit						
Computed RW or		Type of Cable	No Entry	Total	Percent	Total	to RW	to (
			110		VDOT			_
or User Const		(Pair Cable)	Required	Length(ft)		Cost	Project	Pi
Computed RW		(Pair Cable) 900		Length(ft) 3,400	100%	Cost \$86,035	Project \$86,035	Р
] E				100% 100%			P
Computed RW Computed RW Computed RW					100% 100% 100%	\$86,035 \$0 \$0	\$86,035 \$0 \$0	Р
Computed RW Computed RW					100% 100%	\$86,035 \$0 \$0 \$0	\$86,035 \$0 \$0 \$0	P
Computed RW Computed RW Computed RW Computed RW	or Ontic	900			100% 100% 100%	\$86,035 \$0 \$0	\$86,035 \$0 \$0	P
Computed RW Computed RW Computed RW Computed RW Underground - Fibe	or Optic - I	900 In Conduit	Required		100% 100% 100%	\$86,035 \$0 \$0 \$0	\$86,035 \$0 \$0 \$0	
Computed RW Computed RW Computed RW Computed RW Underground - Fibe	or Optic - I	900		3,400	100% 100% 100% 100%	\$86,035 \$0 \$0 \$0 \$86,035	\$86,035 \$0 \$0 \$0 \$86,035	to (
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or	or Optic - I	900 Conduit Type of Cable	Required No Entry	3,400 Total	100% 100% 100% 100% 100%	\$86,035 \$0 \$0 \$0 \$86,035	\$86,035 \$0 \$0 \$0 \$86,035	to (
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or or User Const	or Optic - I	900 In Conduit Type of Cable (Optical Fiber)	Required No Entry	3,400 Total Length(ft)	100% 100% 100% 100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost	\$86,035 \$0 \$0 \$0 \$86,035 to RW Project	to (
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW	or Optic - I	900 In Conduit Type of Cable (Optical Fiber)	Required No Entry	3,400 Total Length(ft)	100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0	\$86,035 \$0 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0	to
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or or User Const Computed RW Computed RW Computed RW	or Optic - I	900 In Conduit Type of Cable (Optical Fiber)	Required No Entry	3,400 Total Length(ft)	100% 100% 100% 100% 100% Percent VDOT 100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0	\$86,035 \$0 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0	to
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW		900 Conduit Type of Cable (Optical Fiber) 144	Required No Entry	3,400 Total Length(ft)	100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0	\$86,035 \$0 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0	to
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or or User Const Computed RW Manholes for UG To		900 Conduit Type of Cable (Optical Fiber) 144	Required No Entry Required	3,400 Total Length(ft)	100% 100% 100% 100% 100% Percent VDOT 100% 100% 100% 100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$0	\$86,035 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$475,346	to (
Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW or or User Const Computed RW RW or RW or		900 In Conduit Type of Cable (Optical Fiber) 144 Service	No Entry Required	3,400 Total Length(ft) 3,400	100% 100% 100% 100% 100% Percent VDOT 100% 100% 100% 100% Percent	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$0	\$86,035 \$0 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$0	to (P)
Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW or or User Const Computed RW or or User Const		900 In Conduit Type of Cable (Optical Fiber) 144 Service	Required No Entry Required	3,400 Total Length(ft)	100% 100% 100% 100% 100% 100% 100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$475,346 Total Cost	\$86,035 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$475,346 to RW	to (
Computed RW Computed RW Computed RW Computed RW Computed RW Underground - Fibe Computed RW or or User Const Computed RW RW Manholes for UG Te Computed RW or		900 In Conduit Type of Cable (Optical Fiber) 144 Service	No Entry Required	3,400 Total Length(ft) 3,400	100% 100% 100% 100% 100% Percent VDOT 100% 100% 100% 100% Percent	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$0	\$86,035 \$0 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$0	to 'P
Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW or or User Computed RW or or User Computed RW	elephone	900 In Conduit Type of Cable (Optical Fiber) 144 Service Item Telephone Manhole	No Entry Required	3,400 Total Length(ft) 3,400	100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$475,346 Total Cost	\$86,035 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$0 to RW Project	to 'P
Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW or or User Const Computed RW RW or or User Const	elephone	900 In Conduit Type of Cable (Optical Fiber) 144 Service Item Telephone Manhole	No Entry Required	3,400 Total Length(ft) 3,400	100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$475,346 Total Cost	\$86,035 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$0 to RW Project	to (Pi
Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Manholes for UG To Computed RW	elephone	900 In Conduit Type of Cable (Optical Fiber) 144 Service Item Telephone Manhole	No Entry Required No Entry Required	3,400 Total Length(ft) 3,400	100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$0 \$475,346 Total Cost \$0 \$0	\$86,035 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$475,346 to RW Project \$0 \$0	to (P
Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW or or User Const Computed RW Or Or User Const Computed RW	elephone sosts Misc. Tele	900 In Conduit Type of Cable (Optical Fiber) 144 Service Item Telephone Manhole Telephone Manhole	No Entry Required No Entry Required No Entry Required	3,400 Total Length(ft) 3,400	100% 100%	\$86,035 \$0 \$0 \$86,035 Total Cost \$475,346 \$0 \$0 \$0 \$475,346 Total Cost \$0 \$0	\$86,035 \$0 \$0 \$86,035 to RW Project \$475,346 \$0 \$0 \$475,346 to RW Project \$0 \$0	to (Pi

Computed RW or Const Computed RW	Type of Service .650 Coax	No Entry Required	Number of Pole Att'mnts	Percent VDOT 100%	Total Cost \$41,742		to C
Computed RW Computed RW Computed RW				100% 100% 100%	\$0 \$0 \$0 \$41,742	\$0 \$0 \$0	
Underground CATV Computed RW or or User Const	Type of Service	No Entry Required	Total Length(ft)	Percent VDOT	741,742 Total Cost	to RW	to C Pro
Computed RW Computed RW Computed RW Computed RW	.650 Coax		3,400	100% 100% 100% 100%	\$57,357 \$0 \$0 \$0	\$0	
Power Units		N 5			\$57,357	\$57,357	
Computed or User RW or Const Computed RW Computed RW	CATV Power Supply CATV Power Supply	No Entry Required	Quantity	Percent VDOT 100% 100%	Total Cost \$0 \$0	\$0	to C Pro
Misc. CATV Costs	Misc. CATV Costs Charge	ed to RW Project:		, [TOTAL CATV	Total to RW Proj	Total to Cor Proj
				_			
	Misc. CATV Costs Charged t	to Const. Project:] [\$99,099	\$99,099	
D. WATER	Misc. CATV Costs Charged t	to Const. Project:]	\$99,099	\$99,099	
Water Line Computed RW or	Diameter of	No Entry	Total	Percent	Total	to RW	to C
Water Line Computed RW or or User Const Computed Const Computed Const Computed Const Computed Const			Total Length(ft) 3,400	100% 100% 100%	Total Cost \$792,922 \$0 \$0	to RW Project \$0 \$0 \$0	to C Pro \$792
Water Line Computed RW or or User Const Computed Const Computed Const	Diameter of Water Pipe (in)	No Entry	Length(ft)	VDOT 100% 100%	Total Cost \$792,922 \$0	to RW Project \$0 \$0 \$0	Pro
Water Line Computed RW or or User Const Computed Const Computed Const Computed Const Computed Const	Diameter of Water Pipe (in)	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$792,922 \$0 \$0	to RW Project \$0 \$0 \$0	Pr \$792

	E. SA	NITAI	RY S	SEWER						
	Sewer Line									
	Computed	RW or		Diameter of	No Entry	Total	Percent	Total	to RW	to Const
	or User	Const	_	Sewer Pipe (in)	Required	Length(ft)	VDOT	Cost	Project	Project
Α	Computed	Const		12		200	100%	\$23,140	\$0	\$23,140
В	Computed	Const					100%	\$0	\$0	
С	Computed	Const					100%	\$0	\$0	\$0
D	Computed	Const					100%	\$0	\$0	\$0
								\$23,140	\$0	\$23,140
	Misc. Sewe	r Costs						TOTAL SEWER	Total to RW Proj	Total to Const
E			Misc	. Sewer Costs Charged to	Const. Project:					Proj
F			M	isc. Sewer Costs Charge	d to RW Project:			\$23,140	\$0	\$23,140

F. NATURAL GAS / PROPANE Distribution Computed row or User Const Gas Line (in) No Entry Total Length(ft) Percent VDOT Project Total to RW VDOT Cost Project A Computed RW Computed RW Computed RW Computed RW Computed RW Computed RW DOWN SUPPORT SUPP	to Const Project
Computed or User RW or Outser Diameter of Gas Line (in) No Entry Required Total Length(ft) Percent VDOT Total Cost Project A Computed RW 6 3,400 100% \$225,390 \$225,390 B Computed RW 100% \$0 \$0 \$0 C Computed RW 100% \$0 \$0 D Computed RW 100% \$0 \$0 SO \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Project
or User Const Gas Line (in) Required Length(ft) VDOT Cost Project A Computed RW 6 3,400 100% \$225,390 \$225,390 B Computed RW 100% \$0 \$0 C Computed RW 100% \$0 \$0 D Computed RW 100% \$0 \$0 S \$0 \$0 \$0 \$0 C Computed RW 100% \$0 \$0 S \$0 \$0 \$0 \$0 \$0 E \$0 \$0 \$0 \$0 \$0 E \$0 \$0 \$0 \$0 \$0 \$0 E \$0	Project
B Computed RW 100% \$0 \$0 C Computed RW 100% \$0 \$0 D Computed RW 100% \$0 \$0 100% \$0 \$0 100% \$0 \$0 \$0 \$225,390 \$225,390	
C D Computed RW 100% \$0 \$0 C Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 \$225,390 \$225,390 \$225,390	\$0
D Computed RW 100% \$0 \$0 \$0 \$0 \$225,390	\$0 \$0
	\$0
	\$0
Computed RW or Diameter of No Entry Total Percent Total to RW	to Const
or Üser Const Gas Line (in) Required Length(ft) VDOT Cost Project	Project
E Computed RW 100% \$0 \$0 F Computed RW 100% \$0 \$0	\$0 \$0
G Computed RW 100% \$0 \$0	\$0
H Computed RW 100% \$0 \$0 \$0 \$0 \$0	\$0 \$0
	90
Misc. Natural Gas / Propane Costs TOTAL GAS / Propane Total to RW Proj	Total to Const
I Misc. Gas / Pro Costs Charged to RW Project:	Proj
J Misc. Gas / Pro Costs Charged to Const. Project: \$225,390 \$225,390	\$0
G. PETROLEUM	
Transmission Computed RW or Diameter of No Entry Total Percent Total to RW	to Const
or Üser Const Gas Line (in) Required Length(ft) VDOT Cost Project	Project
A Computed RW 100% \$0 \$0 B Computed RW 100% \$0 \$0	\$0 \$0
C Computed RW 100% \$0 \$0	\$0
D Computed RW 100% \$0 \$0	\$0
\$0 \$0 	\$0
Misc. Petroleum Costs	Total to Const
E Misc. Petroleum Costs Charged to RW Project: Total to RW Project:	Proj
F Misc. Petroleum Costs Charged to Const. Project: \$0 \$0	\$0
r Misc. Petroleum Costs Charged to Const. Project.	
H. CELLULAR	
Cellular Telephone Costs	
A Total Cellular Costs Charged to RW Project: Total Cellular Costs Charged to RW Project:	Total to Const Proj
	\$0
B Total Cellular Costs Charged to Const. Project: 50 \$0	\$0
L ADDITIONAL COSTS	
I. ADDITIONAL COSTS	
Additional Utility Costs to Right-of-Way Project :	
Comments:	
Additional Utility Costs to Construction Project :	
Comments:	$\overline{}$
Additional Utility Costs to Utility Owners/Others:	==
Additional Utility Costs to <u>Utility Owners/Others</u> :	===
Comments:	
TOTAL HITH ITV COOT, DIGHT OF WAY DOO FOT	2 054 052
TOTAL UTILITY COST - RIGHT-OF-WAY PROJECT \$	2,851,952
TOTAL UTILITY COST - CONSTRUCTION PROJECT	\$816,063
TOTAL UTILITY COST - <u>UTILITY OWNER / OTHERS</u>	\$0
TOTAL OTHER TOWNER TO OTHER TOWNER TOWNER TO OTHER TOWNER TOWNER TO OTHER TOWNER TOWNE	
	3,668,015
GRAND TOTAL UTILITY COSTS (PCES)	5,000,010
GRAND TOTAL UTILITY COSTS (PCES)	Version 3.10



Project Cost Estimating System MANUAL ESTIMATE



AD YEAR

	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

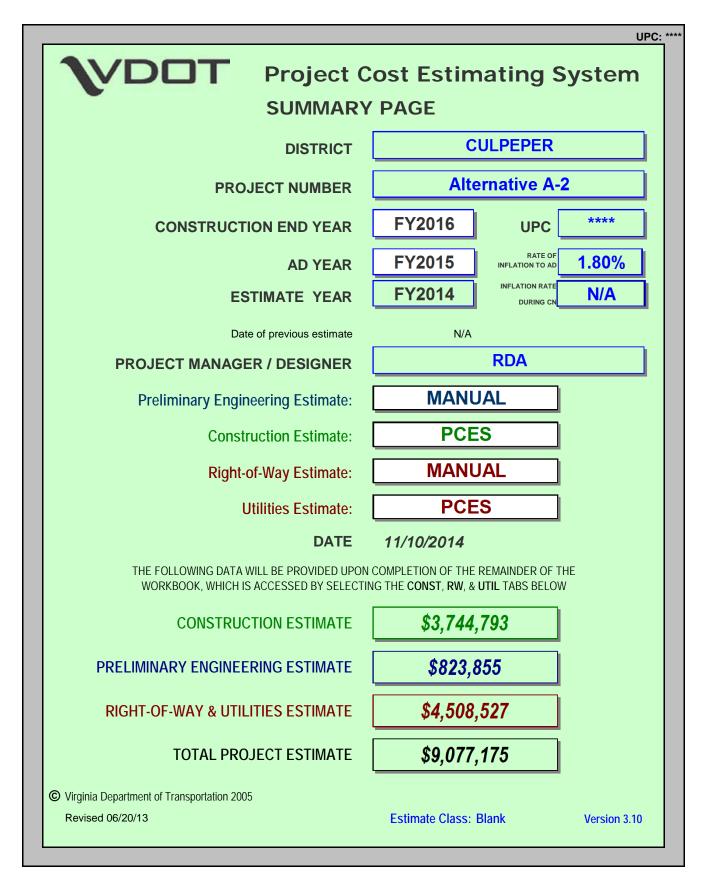
ESTIMATE YEAR

			FY2014	1.80%	FY2015
			\$13,791,000	PE	\$13,791,000
			\$7,000,344	RW	\$7,000,344
			\$114,916,991	CN	\$116,985,497
			\$135,708,335	TOTAL	\$137,776,841
Job#	Phase	Comment			Estimate
	PE				\$13,791,000
	[FL				\$13,791,000
		12% of CN Co	st		
	RW				\$581,440
					+ + + + + + + + + + + + + + + + + + +
		Relocations/To	tal Takes		
	RW				\$2,851,952
		Litility Delegati			
		Utility Relocation	ons		
	RW				\$3,566,952
		RW Acquisition	n		
					ı
	CN				\$114,916,991
		From Quantity	Take-off Estimate		
					· 1

Right of Way											
Qty.	Unit	R/W Type	Unit Price	Multiplier	Cost						
59619	SF	Fee Taking (Commercial)	\$21.30	2.75	\$3,492,182.93						
4235	SF	Fee Taking (Residential)	\$6.42	2.75	\$74,768.93						
0	LS	Utility RW Project	\$0.00	1.00	\$2,851,952.36						
1	EA	Total Take (Commercial)	\$0.00	1.00	\$581,440.00						
				Total	\$7,000,344.21						

	% PE	CN	PE Cost
PE Estimate	12%	114916991	\$13,791,000.00

Assumptions:
Storm Drop Inlet every 300 LF
24" storm sewer pipe for entire length of project



				UPC: ***
	stimating System ON / BRIDGE / PE		VD	TC
Project No.	** MISSING DATA	**		
Interstate Project ?	No	*		
Maintenance Project ?	No	*		
Route Number		*		
Geometric Standard	GS-5	*	Urban Principal Arterial System	
Ad Date	2015			
Design Year ADT		*	Project Terrain Rolling	
Current (Recent) ADT		*	Minimum	
Enter Design Speed (MPH) (30, 40, 45, 50 or 60)	45	*	Design Speed =	
Box Must Be Empty	No			
Box Must Be Empty	No			
Project Length (mi.)	0.28	*	Number of Length of Additional Lanes: Lanes (n	
Total Length -Adding or Building <u>Two Lanes</u> (mi.)	0.11	*	None	
Total Length - Adding or Building Four Lanes (mi.)		*	None	
Total Length - Building Ramps and Loops (mi.)	0.17	*	None	
Shoulder or Curb & Gutter? (Select S or C&G)	C&G	*	Enter Lane Width (ft) >	
Median Type - Graded, Raised, or None?	N	*	Normal Lane Width(ft) 12	
Number of Crossovers (Divided Highways ONLY)	0	*		
Length - Curb & Gutter - Left PLUS Right Side (ft.)	2,820			
Length - Sidewalk - Left PLUS Right Side (ft.)		*		
Bike / Pedestrian Type	None			
Total Length - Raised Median (ft.)	350			
	330			
Number of <u>Right Turn Lanes</u> - Left PLUS Right Side Number of Left Turn Lanes - (Undivided Only)	==	×	CIII	LPEPER
Number of Left Turn Lanes - (Ordivided Only)		*	90% Cost Fac	
			Construction Costs	
Signals, ITS, Signs and Lighting Costs*	\$348,871		Base #1 (PCES) \$3	,171,189
Cost of Large Drainage Structures	\$0		Base #2	\$0
In-Plan Utility Costs*	\$734,456		Enter Const CE Cost >	\$0
Adjustment for Unusual Construction Costs	\$450,000			\$507,390
* Totals include district factor calculations			Estimate (2014)\$33	,678,579
Additional (or Unusual) P. E. Costs				
Select % of PE to be performed by Consultants	100%		PE Cost \$8	45,797
Note: <u>Do Not Include Bridge P. E. Costs Here</u>	Roadway	/ P.	E. / Roadway Const. = 22.6%	

© Virginia Department of Transportation 2005 Revised 06/20/13 Today's Date: 11/10/14

Version 3.10

Version 3.10

		UPC: ***
VDOT	Project Cost Estimating System Miscellaneous Cost Estimates	\ VDOT
	COST OF LARGE DRAINAGE STRUCTURES	
Job# Descripti	on	Cost ()
		\$0
Α	DJUSTMENT FOR UNUSUAL CONSTRUCTION CO	DSTS
Туре	Description	Cost ()
Other	Stormwater Management (SWM Facilities)	\$250,000
Maintenance of Traffic	MOT Costs	\$200,000
		\$450,000
		\$450,000

			SIGN	IALS,	ITS,	SIGN	S an	d LIG	HTI	NG C	OS	T WORKSH	EET		
Stand	d Alone Traffic Proje	ect:	No	1											UPC: ****
SIGN	ALS anent Signals	New/ Mod.	Intersection Type	Direction		ajor Direction	Lance	Direction	Cro		Lance	Poles	Detection	Pre-emption	Cost
	Location/Descriptio		Туре	Direction	Lanes	Direction	Lanes	Direction	Lanes	Direction	Lanes	Foles	Detection	rre-emption	Cost
	River Rd	New	Tee	North	1	South	1	East	2	West	0	Comb. M.A. Lighting	Video	Yes	\$191,260
2	Rte. 250/E. High St.	Mod.	Four-way	East	4	West	4	North	3	South	2	Comb. M.A. Lighting	Video	Yes	\$136,807
3 4		1	-										-	-	\$0 \$0
5															\$0
6															\$0
/ 8															\$0 \$0
9															\$0
10															\$0
														Quantity	Cost
										Tempora	ry Sigr	nals - New Equipment			\$0
Temporary Signals - Modified Equipment												\$0			
		Locatio	n/Description	1										7	Cost
	ELLANEOUS 1														
SIGN	AL WORK 2	<u> </u>]	
ITC		Lasatia	n /Danasintias	_								Signa	als Construc	tion Subtotal	
<u>ITS</u>	ITS WORK 1		n/Description	1										1	Cost
														_	
10 A 10	OR SIGN STRUCTUR	250						Limbtod	la alua	ladia Daa		ı	TS Construc	tion Subtotal	
MAJC	Type of Sign	KES	Comment			Quantity	Unit	Y/N		led in Roa hting? yes		Cost/Sig	1		Extended Cost
1	Cantilever		For Loop				Ea.	Yes	ľ	No]	59,568]	\$59,568
2							Ea.								
3 4							Ea. Ea.								
5							Ea.								
6							Ea. Ea.								
′		Locatio	n/Description	1			La.		J					J	Cost
	ELLANEOUS 1														
SIGN	WORK 2	<u> </u>]	
												Sig	ns Construc	tion Subtotal	\$59,568
LIGH															
	Continuous Roadw		Funa of Liabti	n.a	Commo	unto.				N.	a lan	••	Number of Miles		Cont
	1	Orban	Type of Lighti	ng	Comme	HILS				l "	o. Lan	es]	Of Willes	1	Cost \$0
										•		•	Number	•	
	1	Freewa	y Type of Lig	hting	Comme	ents				l N	o. Lan	es 1	of Miles	1	Cost \$0
	'									J		J	Number of		φ0
	Interchange	Interch	ange Type		,	Тур	e of Ligl	nting		1			Interchange	s	Cost
	1														\$0 \$0
	3														\$0
	B40									-				-	01
	Miscellaneous 1	Locatio	n/Description	1										1	Cost
	2	2													
												Lighti		tion Subtotal	
														CTION TOTAL	\$387,635
	PROJECT COMME	NTS								District faci	tor will b	e applied when the total o	ost is passed i	to the const-1 wo	rksheet
	Prepared by				Dat	te Prepared/N	Nodified:								Version 3.10





UPC: ****

UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL **Transmission** Computed RW or Type No Entry Number Rural Percent Total to RW to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project \$0 Computed RW Rural 100% \$0 \$0 В Computed RW Rural 100% \$0 \$0 \$0 С Computed RW Rural 100% \$0 \$0 \$0 Computed Rural 100% \$0 \$0 \$0 **Distribution - Aerial** No Entry to RW Computed RW or Туре Number Rural Percent Total to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project Computed RW Single Phase Rural 100% \$5.544 \$5.544 \$0 Computed RW Two Phase 1 Rural 100% \$8,316 \$8,316 \$0 G Computed RW Three Phase 3 Rural 100% \$33,266 \$33,266 \$0 Н Computed RW Dual Three Phase 4 Rural 100% \$60,984 \$60,984 \$0 Computed RW Rural 100% \$0 \$0 \$0 Rural 100% \$108,109 \$108,109 \$0 **Distribution - Underground - by Linear Foot** Computed RW or Type No Entry Total Percent Total to RW to Const or User Const of Service Required Length(ft) VDOT Cost Project Project \$0 Computed RW 100% \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed 100% \$0 \$0 \$0 \$0 \$0 Distribution - Underground - by Pole Equivalent RW or No Entry to RW Computed Equivalent Type Equiv. # Percent Total to Const or User Const of Pole Required of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Q Computed RW 100% \$0 \$0 \$0 100% \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** RW or No Entry to RW Computed Total Percent Total to Const Type Project \$0 or User Const of Service Required Length(ft) VDOT Cost Project \$0 Computed Computed RW RW 100% 100% \$0 \$0 \$0 \$0 \$0 **\$**0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Computed Number Percent Total to Const Project of Manhole Required of MH's VDOT or User Cost Project Const U \$0 \$0 \$0 Computed RW RW 100% 100% \$0 \$0 \$0 Computed W RW 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 Computed \$0 \$0 Misc. Electrical Costs **Total to Const** TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$108,109 \$108,109 **\$**0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPHO	ONE							
	Aerial - Copper Wire Computed RW or or User Const	Type of Cable (Pair Cable)	No Entry Required	Number of Poles		Percent VDOT	Total Cost	to RW Project	to Const Project
A B	Computed RW Computed RW	900	Nequiled	3		100% 100%	\$15,186 \$0	\$15,186 \$0	\$0 \$0
C D	Computed RW Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
	Aerial - Fiber Optic						\$15,186	\$15,186	\$0
	Computed RW or or User Const	Type of Cable (Optical Fiber)	No Entry Required	Number of Poles		Percent VDOT	Total Cost	to RW Project	to Const Project
E F G	Computed RW Computed RW Computed RW	144		6		100% 100% 100%	\$73,763 \$0 \$0	\$73,763 \$0 \$0	\$0 \$0 \$0
Н	Computed RW Computed RW					100%	\$0 \$0 \$73,763	\$0 \$0 \$73,763	\$0 \$0 \$0
	Underground - Coppe Computed RW or	er Wire Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
1	or User Const Computed RW	(Pair Cable)	Required	Length(ft)) 	VDOT 100%	Cost \$0	Project \$0	Project \$0
J K	Computed RW Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
L	Computed RW				<u></u>	100%	\$0 \$0	\$0 \$0	\$0 \$0
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
M N	or User Const Computed RW Computed RW	(Optical Fiber)	Required	Length(ft)]	100% 100%	Cost \$0 \$0	Project \$0 \$0	Project \$0 \$0
0 P	Computed RW Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
	Underground - Coppe	er Wire - In Conduit					\$0	\$0	\$0
	Computed RW or or User Const	Type of Cable (Pair Cable)	No Entry Required	Total Length(ft)	1	Percent VDOT	Total Cost	to RW Project	to Const Project
Q R	Computed RW Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
S T	Computed RW Computed RW					100% 100%	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0
	Underground - Fiber (Optic - In Conduit Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
U	or User Const Computed RW	(Optical Fiber)	Required	Length(ft)]	VDOT 100%	Cost \$0	Project \$0	Project \$0
V W	Computed RW Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
Х	Computed RW				<u> </u>	100%	\$0 \$0	\$0 \$0	\$0 \$0
	Manholes for UG Tele Computed RW or or User Const	epnone Service	No Entry Required	Quantity		Percent VDOT	Total Cost	to RW Project	to Const Project
Y Z	Computed RW Computed RW	Telephone Manhole Telephone Manhole	required	qualitity		100% 100%	\$0	\$0 \$0	\$0 \$0
	Misc. Telephone Cost	ts							Talk 2
AA		Misc. Telephone Costs Charg	jed to RW Project:				TOTAL TELEPHONE	Total to RW Proj	Total to Const Proj
ВВ	Mis	sc. Telephone Costs Charged	to Const. Project:				\$88,949	\$88,949	\$0

C. CATV								
Aerial CATV				Number				
Computed RW o		Туре	No Entry	of Pole	Percent	Total	to RW	to Cons
or User Cons A Computed RW		of Service .650 Coax	Required	Att'mnts 32	VDOT 100%	Cost \$21,202	Project \$21,202	Projec \$
B Computed RW C Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$i \$i
D Computed RW					100%	\$0	\$0	\$(\$(
Underground CA	TV					\$21,202	\$21,202	•
Computed RW or User Cons		Type of Service	No Entry Required	Total Length(ft)	Percent VDOT	Total Cost	to RW Project	to Cons Projec
E Computed RW		Of Gerrice	rtequired	Length(it)	100%	\$0	\$0	\$
F Computed RW G Computed RW	Ⅎ				100% 100%	\$0 \$0	\$0 \$0	\$I \$I
H Computed RW					100%	\$0 \$0	\$0 \$0	<u>\$</u>
Power Units					_			
Computed RW of Or User Cons		Item	No Entry Required	Quantity	Percent VDOT	Total Cost	to RW Project	to Cons Projec
I Computed RW J Computed RW		CATV Power Supply CATV Power Supply			100% 100%	\$0 \$0	\$0 \$0	\$(\$(
	_	CATTY TOWER Supply			10070	\$	\$ 0	
Misc. CATV Cost						TOTAL CATV	Total to RW Proj	Total to Const Proj
		Misc. CATV Costs Charged	d to RW Project:					
	Mis	sc. CATV Costs Charged to	Const. Project:			\$21,202	\$21,202	\$
D. WATE	R							
Water Line								
Computed RW of User Cons	r	Diameter of						
		Water Pipe (in)	No Entry Required	Total Length(ft)	Percent VDOT	Total Cost	to RW Project	to Cons Projec
A Computed Con:	st st	Water Pipe (in)			VDOT 100%	Cost \$108,834	Project \$0	Project \$108,83
A Computed Cons B Computed Cons C Computed Cons	st st st			Length(ft)	VDOT 100% 100% 100%	Cost \$108,834 \$0 \$0	Project \$0 \$0 \$0	Projec \$108,83 \$ \$
A Computed Con: Computed Con:	st st st			Length(ft)	VDOT 100% 100%	Cost \$108,834 \$0	Project \$0 \$0	Projec \$108,83 \$ \$ \$
A Computed Cons B Computed Cons C Computed Cons	et St St St St			Length(ft)	VDOT 100% 100% 100%	Cost \$108,834 \$0 \$0	Project \$0 \$0 \$0 \$0	Projec \$108,83 \$ \$ \$ \$108,83
A Computed Con- B Computed Con- C Computed Con- C Computed Con- Misc. Water Cost	st s	8	Required	Length(ft)	 VDOT 100% 100% 100%	Cost \$108,834 \$0 \$0	Project \$0 \$0 \$0 \$0	Projec \$108,83 \$
A Computed Con- B Computed Con- C Computed Con- C Computed Con- Misc. Water Cost	st s	8 sc. Water Costs Charged to	Required Const. Project:	Length(ft)	VDOT 100% 100% 100%	\$108,834 \$0 \$0 \$0 \$108,834	Project \$0 \$0 \$0 \$0 \$0 \$0	Projet \$108,83 \$ \$ \$108,83 Total to Const Proj
A Computed Con- Computed Con- Computed Con- Computed Con- Computed Con- Misc. Water Cost	st s	8	Required Const. Project:	Length(ft)	VDOT 100% 100% 100%	Cost \$108,834 \$0 \$0 \$0 \$108,834	Project \$0 \$0 \$0 \$0 \$0 \$0	Proje \$108,83 \$ \$ \$108,83 Total to Const Proj
A Computed Con- Computed Con- Computed Con- Computed Con- Computed Con- Computed Con- E Misc. Water Cost	t t st	sc. Water Costs Charged to	Required Const. Project:	Length(ft)	VDOT 100% 100% 100%	\$108,834 \$0 \$0 \$0 \$108,834	Project \$0 \$0 \$0 \$0 \$0 \$0	Proje \$108,83 \$ \$108,83 Total to Const
A Computed Con- B Computed Con- C Computed Con- C Computed Con- Misc. Water Cost	t t st	sc. Water Costs Charged to	Required Const. Project:	Length(ft)	VDOT 100% 100% 100%	\$108,834 \$0 \$0 \$0 \$108,834	Project \$0 \$0 \$0 \$0 \$0 \$0	Proje \$108,83 \$ \$ \$108,83 Total to Const
A Computed Con- B Computed Con- C Computed Con- C Computed Con- Misc. Water Cost E	t t st	sc. Water Costs Charged to	Required Const. Project:	Length(ft)	VDOT 100% 100% 100%	\$108,834 \$0 \$0 \$0 \$108,834	Project \$0 \$0 \$0 \$0 \$0 \$0	Proje \$108,83 \$ \$ \$108,83 Total to Const Proj
A Computed Con- B Computed Con- C Computed Con- D Computed Con- Misc. Water Cost E F E. SANIT Sewer Line Computed RW Computed	t t t t t t t t t t t t t t t t t t t	sc. Water Costs Charged to Misc. Water Costs Charged SEWER Diameter of	Required Const. Project: d to RW Project:	Length(ft) 840	VDOT 100% 100% 100%	\$108,834 \$0 \$0 \$0 \$108,834	Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0	Projet \$108,83 \$108,83 \$108,83 \$108,83
A Computed Condition Computed Condition Computed Condition Computed Condition Misc. Water Cost E F E. SANIT Sewer Line Computed RW or User Condition A Computed Condition Computed Condition Computed RW or User Condition Computed Condition Condition Computed Condition Condition Computed Condition Condi	s Mis	sc. Water Costs Charged to Misc. Water Costs Charged	Required Const. Project:	Length(ft) 840	VDOT 100% 100% 100% 100% 100%	Cost \$108,834 \$0 \$0 \$0 \$0 \$0 \$108,834 \$	Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0 to RW Project \$0	Projet \$108,83
A Computed Condition Computed Condition Computed Condition Computed Condition Computed Condition Misc. Water Cost E F E. SANIT Sewer Line Computed RW of User Condition Computed Cond	s Mis	sc. Water Costs Charged to Misc. Water Costs Charged SEWER Diameter of Sewer Pipe (in)	Required Const. Project: d to RW Project:	Length(ft) 840	Percent VDOT 100% 100% 100% 100% 100% 100% 100%	Cost \$108,834 \$0 \$0 \$0 \$0 \$108,834 \$\$ TOTAL WATER \$108,834 \$\$ Cost \$85,042 \$0 \$0 \$0	Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0 \$0 \$0	Projet \$108,83 \$ \$108,83 Total to Const Proj \$108,83
A Computed Condition of Con	s Mis	sc. Water Costs Charged to Misc. Water Costs Charged SEWER Diameter of Sewer Pipe (in)	Required Const. Project: d to RW Project:	Length(ft) 840	VDOT 100% 100% 100% 100% 100% Percent VDOT 100% 100%	Cost \$108,834 \$0 \$0 \$108,834 TOTAL WATER \$108,834	Project \$0 \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0	Projet \$108,83
A Computed Concepted Conce	Mis ARY	sc. Water Costs Charged to Misc. Water Costs Charged SEWER Diameter of Sewer Pipe (in)	Required Const. Project: d to RW Project:	Length(ft) 840	Percent VDOT 100% 100% 100% 100% 100% 100% 100%	Total Cost \$85,042 \$0	to RW Project \$0	Projec \$108,83 \$ \$ \$ \$108,83
A Computed Condition Computed Condition Computed Condition Computed Condition Computed Condition Misc. Water Cost E F E. SANIT Sewer Line Computed RW or User Condition Or User Condition Computed Condi	Mis ARY Table 1 Ta	sc. Water Costs Charged to Misc. Water Costs Charged SEWER Diameter of Sewer Pipe (in)	Required Const. Project: I to RW Project: No Entry Required	Length(ft) 840	Percent VDOT 100% 100% 100% 100% 100% 100% 100%	Total Cost \$85,042 \$0	to RW Project \$0	Projec \$108,83

\$85,042

\$85,042

Misc. Sewer Costs Charged to RW Project:

E N/A:	EUDAL O	AO / DDODANE							
F. NA	URAL G	AS / PROPANE							
Distributio									
Computed	RW or	Diameter of	No Entry	Total		Percent	Total	to RW	to Const
or User A Computed	Const RW	Gas Line (in)	Required	Length(ft) 840		100%	Cost \$30,373	Project \$30,373	Project \$0
B Computed	RW	-		040		100%	\$0	\$0	\$0
C Computed	RW					100%	\$0	\$0	\$0
D Computed	RW					100%	\$0	\$0	\$0
							\$30,373	\$30,373	\$0
Transmiss		Diameter of	No Febru	Total		D	T-4-1	4- DW	4- 61
Computed or User	RW or Const	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost	to RW Project	to Const Project
E Computed	RW		rtoquirou		l	100%	\$0	\$0	\$0
F Computed	RW					100%	\$0	\$0	\$0
G Computed	RW RW					100%	\$0	\$0	\$0
H Computed	KW			<u> </u>		100%	\$0 \$0	\$0 \$0	\$0 \$0
							Ψ		, v
Misc. Natu	ral Gas / Prop	ane Costs					TOTAL GAS /		Total to Const
		O / D O4- Oh	4- DW D!4-				PROPANE	Total to RW Proj	Proj
1	IVII	isc. Gas / Pro Costs Charged	to RW Project:						
J	Misc.	Gas / Pro Costs Charged to	Const. Project:				\$30,373	\$30,373	\$0
G. PF	TROLEUN	Л							
Transmiss						_			
Computed or User	RW or Const	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost	to RW Project	to Const Project
A Computed	RW	Gas Line (iii)	Required	Lengui(it)	ı	100%	\$0	\$0	\$0
B Computed	RW					100%	\$0	\$0	\$0
C Computed	RW					100%	\$0	\$0	\$0
D Computed	RW					100%	\$0	\$0	\$0
							\$0	\$0	\$0
Misc. Petro	leum Costs								T
							TOTAL PETROLEUM	Total to RW Proj	Total to Const Proj
E	Mis	sc. Petroleum Costs Charged	to RW Project:						,
F	Misc. F	Petroleum Costs Charged to	Const. Project:				\$0	\$0	\$0
			<u>'</u>						
H. CEI	LLULAR								
Cellular Te	lephone Cost	S							
							TOTAL CELLULAR	Total to RW Proj	Total to Const
Α	1	Total Cellular Costs Charged	to RW Project:					,	Proj
В	Tota	al Cellular Costs Charged to	Const. Project:				\$0	\$0	\$0
			,						
I ADE	ITIONAL	COSTS							
i. ADL	IIIONAL	00373							
		Add	ditional Utili	ty Costs to	Right-of-Way Project :				
Comments:									
		Ado	ditional Utili	ty Costs to	Construction Project :				
Comments:									
		۸ ما ما	itional Hitilit	v Coete to	Itility Owners/Others				=
		Add	inonal Utilit	y Costs to	<u> Utility Owners/Others</u> :				
Comments:									
			TOTAL UTIL	LITY COST - F	IGHT-OF-WAY PROJECT				\$248,634
									==
			TOTAL UTILI	TY COST - CO	NSTRUCTION PROJECT				\$193,875
			TOTAL LITE	ITV COST U	TILITY OWNER / OTHERS				\$0
			TOTALUTIL	111 0031 - <u>U</u>	ILLIT OWNER / UTTERS				φυ
		GF	RAND TOT	AL UTILT	TY COSTS (PCES)				\$442,509
		0.			()				, , , , , ,
									Vorsion 2.40
									Version 3.10



Project Cost Estimating System MANUAL ESTIMATE

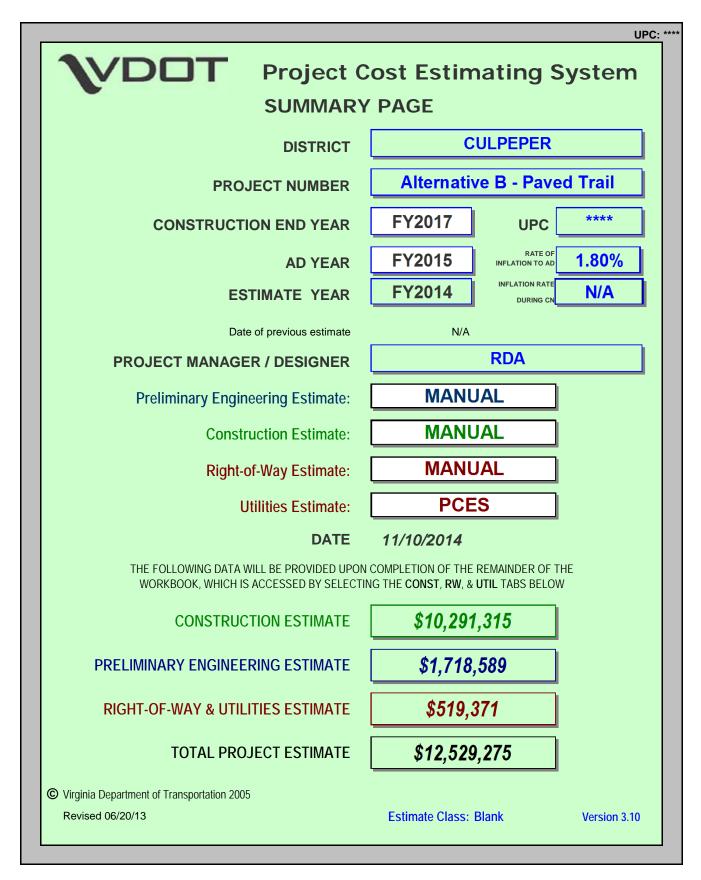


	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

	IIIUKES	\$0	φυ	Φ0
RUMS			\$0	
TRNS*P	ORT			\$0
AWARD				\$0
PROJEC	TION			\$0
		ESTIMATE YEAR		AD YEAR
		FY2014	1.80%	FY2015
		\$823,855	PE	\$823,855
		\$4,508,527	RW	\$4,508,527
		\$0	CN	\$0
		\$5,332,381	TOTAL	\$5,332,381
Job#	Phase	Comment		Estimate
$\overline{}$	PE			\$823,855
	<u></u>			+020,000
		PE Cost Estimate [22% (rounded) of	f CN]	
	RW			
		Relocations/Total Takes		
	RW			\$1,656,574
				. , ,
		R/W Total Costs		
	RW			\$2,851,952
				+=,55.,552
		Utilities to be included in the right of	way estimate	

Relocations input from ROW Dept 0 takes

	SF	Cost/SF	Multiplier	Cost
SF of Commercial	23,879	\$25.06	2.75	\$1,645,621
SF of Residential	9,052	\$0.44	2.75	\$10,953
			TOTAL	\$1,656,574
	CI	NI.	PE %	PF
	•	•	Γ	. –
PE Cost Calc	\$3,744	4,793	22%	\$823,854.55



Alternative B - Paved Trail Option

		7				
Price	Item #	Description	Units	Est. Quantity	Unit Price	Extended Amount
VDOT	0100	MOBILIZATION	LS	1.00	\$318,094.88	\$318,094.88
VDOT	00101	CONST. SURVEYING	LS	1.00	\$57,048.49	\$57,048.49
VDOT	00110	CLEARING AND GRUBBING	ACRE	25.50	\$24,591.72	\$627,088.86
			Earthwork			
VDOT	00125	REGULAR EXCAVATION	CY	22556.00	\$19.56	\$441,195.36
			Trail			
VDOT	16242	AGGR. BASE MAT'L NO. 21-B	TON	7723.58	\$27.72	\$214,097.75
VDOT	16335	ASPHALT CONCRETE TY. SM-9.5A	TON	2248.89	\$72.61	\$163,291.82
VDOT	27505	Silt Fence	LF	36320.00	\$2.83	\$102,785.60
		Bridg	ge over Rivanna			
VDOT		Trail Bridge (445' x 15")	SF	6675.00	\$250.00	\$1,668,750.00
			Parking Lot			
VDOT	16242	AGGR. BASE MAT'L NO. 21-B	TON	797.54	\$27.72	\$22,107.92
VDOT	16335	ASPHALT CONCRETE TY. SM-9.5A	TON	174.17	\$72.61	\$12,646.24
VDOT	16373	ASPHALT CONCRETE TY. IM-19.0A	TON	232	101.31	\$23,526.43
VDOT	12600	STD. COMB. CURB & GUTTER CG-6	LF	500	17.23	\$8,615.00
			Drainage			
		STORMWATER FACILITIES	LS	1.00	\$500,000.00	\$500,000.00
		CULVERT EXTENSIONS	EA	6.00	\$100,000.00	\$600,000.00
		DOUBLE BOX CULVERT	LS	1.00	\$1,000,000.00	\$1,000,000.00
			Traffic			
VDOT	54042	TY. B PAVEMENT LINE MARKING 24"	LF	100.00	\$4.96	\$496.00
		HAWK TRAFFIC SIGNALIZATION	LS	1.00	\$200,000.00	\$200,000.00
		Maint	enance of Traffic			
		MOT	LS	1.00	\$100,000.00	\$100,000.00
			Utilities			
PCES		UTILITIES (CONSTR.)	LS	1.00	\$0.00	\$20,248.08
			Incidentals			
		Incidentals (20%)	LS		\$1,140,969.81	\$1,140,969.81
					SUBTOTAL:	\$7,220,962.25
			Contingonou (200/)	A1 111 100 1E		

Contingency (20%) \$1,444,192.45 CEI (20%) \$1,444,192.45 TOTAL \$10,109,347.14





UPC: ****

UTILITIES ESTIMATE Project No.: ** MISSING DATA ** A. ELECTRICAL **Transmission** Computed RW or Type No Entry Number Rural Percent Total to RW to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project \$0 Computed RW Rural 100% \$0 \$0 В Computed RW Rural 100% \$0 \$0 \$0 С Computed RW Rural 100% \$0 \$0 \$0 Computed Rural 100% \$0 \$0 \$0 **Distribution - Aerial** No Entry to RW Computed RW or Туре Number Rural Percent Total to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project Computed RW Single Phase Rural 100% \$5.544 \$5,544 \$0 Computed RW Rural 100% \$0 \$0 \$0 G Computed RW Rural 100% \$0 \$0 \$0 Н Computed RW Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 Rural 100% \$5,544 \$5,544 \$0 **Distribution - Underground - by Linear Foot** Computed RW or Type No Entry Total Percent Total to RW to Const or User Const of Service Required Length(ft) VDOT Cost Project Project \$18,769 Computed RW Single Phase 200 100% \$18,769 \$0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed 100% \$0 \$18,769 \$18,769 \$0 Distribution - Underground - by Pole Equivalent RW or No Entry to RW Computed Equivalent Type Equiv. # Percent Total to Const or User Const of Pole Required of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Q Computed RW 100% \$0 \$0 \$0 100% \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** RW or No Entry to RW Computed Total Percent Total to Const Type Project \$0 Required Project or User Const of Service Length(ft) VDOT Cost \$0 Computed Computed RW RW 100% 100% \$0 \$0 \$0 \$0 \$0 **\$**0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Computed Number Percent Total to Const Project of Manhole Required of MH's VDOT or User Cost Project Const U \$0 \$0 \$0 Computed RW RW 100% 100% \$0 \$0 \$0 Computed W RW RW 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 Computed \$0 Misc. Electrical Costs **Total to Const** TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$24,31 \$24,313 **\$**0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPHO	ONE							
A B C D	Aerial - Copper Wire Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	[Type of Cable (Pair Cable) 900 600	No Entry Required	Number of Poles 3 4	Percent VDOT 100% 100% 100% 100%	Total Cost \$15,186 \$18,801 \$0	to RW Project \$15,186 \$18,801 \$0	to Const Project \$0 \$0 \$0
E F G H	Aerial - Fiber Optic Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	<u>[</u>	Type of Cable (Optical Fiber) 144	No Entry Required	Number of Poles 2	Percent VDOT 100% 100% 100% 100%	\$33,987 Total Cost \$24,588 \$0 \$0 \$0 \$24,588	\$33,987 to RW Project \$24,588 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0 \$0 \$0
I J K L	Underground - Coppe Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW	er Wir	Type of Cable (Pair Cable) 900 600	No Entry Required	Total Length(ft) 200 200	Percent VDOT 100% 100% 100% 100%	Total Cost \$4,340 \$3,978 \$0 \$0 \$8,317	to RW Project \$4,340 \$3,978 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0
M N O P	Underground - Fiber Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	Optic	Type of Cable (Optical Fiber) 144	No Entry Required	Total Length(ft) 200	Percent VDOT 100% 100% 100% 100%	Total Cost \$22,659 \$0 \$0 \$0	to RW Project \$22,659 \$0 \$0 \$2	to Const Project \$0 \$0 \$0 \$0 \$0
Q R S T	Underground - Coppe Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW	er Wir	e - In Conduit Type of Cable (Pair Cable)	No Entry Required	Total Length(ft)	Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
U V W X	Underground - Fiber Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	Optic	- In Conduit Type of Cable (Optical Fiber)	No Entry Required	Total Length(ft)	Percent VDOT 100% 100% 100% 100%	\$0 Total Cost \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0
Y Z	Manholes for UG Tele Computed RW or or User Const Computed RW Computed RW	E	e Service Item Telephone Manhole Telephone Manhole	No Entry Required	Quantity	Percent VDOT 100% 100%	Total Cost \$0 \$0	to RW Project \$0 \$0	to Const Project \$0 \$0
AA BB		Misc. T	elephone Costs Charged				TOTAL TELEPHONE \$89,550	Total to RW Proj \$89,550	Total to Const Proj \$0

C. CATV								
C. CATV								
Aerial CATV			Number					
Computed RW or or User Const	Type of Service	No Entry Required	of Pole Att'mnts		Percent VDOT	Total Cost	to RW Project	to Const Project
A Computed RW	OI GOITICE	rtoquilou	Attimits	1	100%	\$0	\$0	\$0
B Computed RW C Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
D Computed RW					100%	\$0		\$0 \$0
						\$0	\$0	\$0
Underground CATV Computed RW or	Туре	No Entry	Total		Percent	Total	to RW	to Const
or User Const	of Service	Required	Length(ft)	L	VDOT	Cost	Project	Project
E Computed RW F Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
G Computed RW					100%	\$0	\$0	\$0
H Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
Power Units						Ψ	ΨŪ	ΨŪ
Computed RW or		No Entry			Percent	Total	to RW	to Const
or User Const Computed RW	CATV Power Supply	Required	Quantity	1	100%	Cost \$0	Project \$0	Project \$0
J Computed RW	CATV Power Supply				100%	\$0	\$0	\$0
Misc. CATV Costs					[
						TOTAL CATV	Total to RW Proj	Total to Const Proj
	Misc. CATV Costs Charged	d to RW Project:						110
	Misc. CATV Costs Charged to	Const. Project:			1	\$0	\$0	\$0
					'			
Water Line	Diameter of Water Pipe (in)	No Entry Required	Total Length(ft)		Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0	Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
Misc. Water Costs					. [\$0 TOTAL WATER	\$0 Total to RW Proj	Total to Const
E	Misc. Water Costs Charged to	Const. Project:						,
F	Misc. Water Costs Charge	d to RW Project:				\$0	\$0	\$0
E. SANITAR	RY SEWER							
Cours Line								
Sewer Line Computed RW or	Diameter of	No Entry	Total		Percent	Total	to RW	to Const
or User Const	Sewer Pipe (in)	Required	Length(ft)		VDOT	Cost	Project	Project
A Computed Const B Computed Const	8		200		100% 100%	\$20,248 \$0	\$0 \$0	\$20,248 \$0
C Computed Const					100%	\$0	\$0	\$0
D Computed Const					100%	\$0 \$20,248	\$0 \$0	\$0 \$20,248
Misc. Sewer Costs						TOTAL SEWER	Total to RW Proj	Total to Const
E	Misc. Sewer Costs Charged to	Const. Project:				TOTAL DETTER	. 5 10 101	Proj
F	Misc. Sewer Costs Charged	d to RW Project:				\$20,248	\$0	\$20,248

	F. NA	TURAL	GA	S / PROPANE							
	Distribution Computed	RW or		Diameter of	No Entry	Total		Percent	Total		to Const
A	Computed	RW)	Gas Line (in)	Required	Length(ft)	l	100%	Cost \$0	\$0	Project \$0
B C D	Computed Computed	RW RW RW						100% 100% 100%	\$0 \$0 \$0	\$0	\$0 \$0 \$0
								10070	\$0		\$0
	Transmiss Computed or User	RW or Const		Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost		to Const Project
E F	Computed Computed	RW RW	}	Ous Line (iii)	rtequiled	Length(it)		100% 100%	\$0 \$0		\$0 \$0
G H	Computed Computed	RW RW						100% 100%	\$0 \$0	\$0	\$0 \$0
									\$0	\$0	\$0
	Misc. Natu	ıral Gas / I	-		I to DIM Dool of				TOTAL GAS / PROPANE	Total to RW Proj	Total to Const Proj
J				c. Gas / Pro Costs Charged Gas / Pro Costs Charged to					\$0	\$0	\$0
	0 -				7	<u> </u>					
	G. PE		:UIVI								
	Computed or User	RW or Const		Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost		to Const Project
A B	Computed Computed	RW RW	}	Ous Line (III)	roquilou	Longar(it)		100%	\$0 \$0	\$0	\$0 \$0
C D	Computed Computed	RW RW						100% 100%	\$0 \$0		\$0 \$0
				<u></u>				<u> </u>	\$0	\$0	\$0
	Misc. Petr	oleum Co							TOTAL PETROLEUM	Total to RW Proj	Total to Const Proj
E F				. Petroleum Costs Charged etroleum Costs Charged to	_	<u> </u>			\$0	\$0	\$0
	H. CE										
	Cellular 16	elephone (TOTAL CELLULAR	Total to RW Proj	Total to Const
A				otal Cellular Costs Charged Cellular Costs Charged to	_				\$0	\$0	Proj \$0
В			TOLAI	Celiulai Costs Charged to	Collst. Project.					<u> </u>	
	I. ADI	DITION	4 <i>L</i> (
Com	ments:			Ado	ditional Utili	ty Costs to	Right-of-Way Project :				
	onco			Add	ditional Utili	ty Costs to	Construction Project :				
Com	ments:										
				Add	litional Utilit	y Costs to	<u>Utility Owners/Others</u> :				
Com	ments:										
					TOTAL UTIL	LITY COST - F	RIGHT-OF-WAY PROJECT				\$113,863
					TOTAL UTILI	TY COST - CO	ONSTRUCTION PROJECT				\$20,248
					TOTAL UTIL	ITY COST - <u>U</u>	TILITY OWNER / OTHERS				\$0
					GRA	ND TOTA	L UTILITY COSTS				\$134,111
											Version 3.10



Project Cost Estimating System MANUAL ESTIMATE



	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0
		ESTIMATE YEAR		AD YEAR
		FY2014	1.80%	FY2015
		\$1,718,589	PE	\$1,718,589
		\$519,371	RW	\$519,371
		\$10,109,347	CN	\$10,291,315
		\$12,347,307	TOTAL	\$12,529,275
		ψ·=,σ···,σσ·		ψ.Ξ,σΞσ,Ξ.σ
Job # Phase	Comment			Estimate
				1
PE				\$1,718,589
	17% of Constru	ıction		
	1770 01 00113010	2011011		J
RW				\$405,507
	RW Acquisition	1		
DW				Ф440 000
RW				\$113,863
	Utility Relocation	on		
	_ min . roiocano	·		
CN				\$10,109,347
	Quantity Takeo	ff Estimate - Paved		
				1
			_	

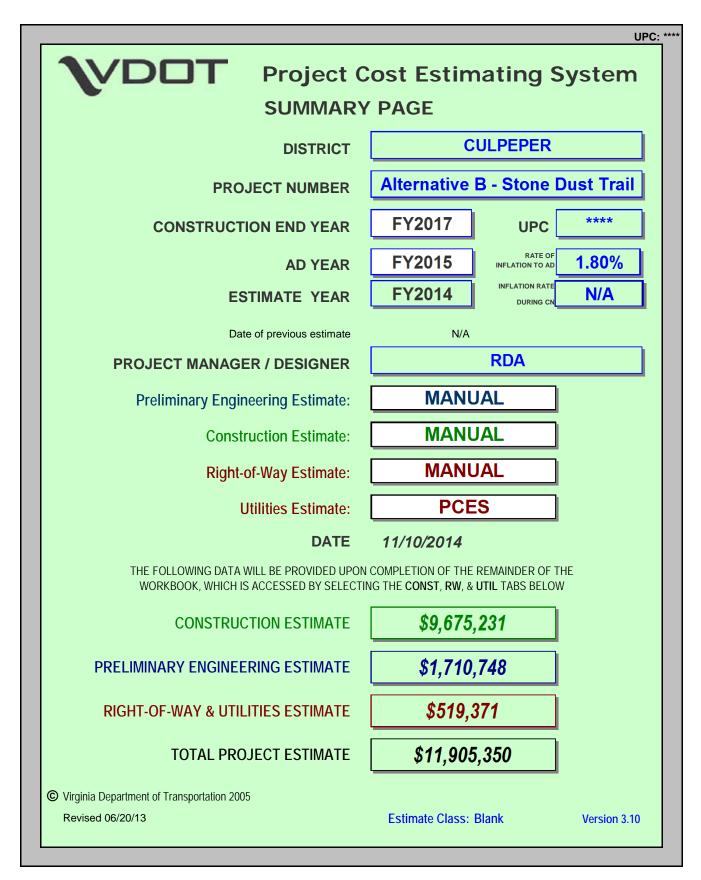
	Right of Way								
Qty.	Unit	R/W Type	Unit Price	Multiplier	Cost				
335130	SF	Fee Taking (Commercial)	\$0.44	2.75	\$405,507.30				
0	SF	Fee Taking (Residential)	\$0.50	2.75	\$0.00				
1	LS	Utility RW Project	\$0.00	1.00	\$113,863.22				
0	EA Total Take (Commercial)		\$0.00	1.00	\$0.00				
				Total	\$519,370.52				

PF	Estimate
r	ESIIIIIale

% PE	CN	PE Cost
17%	\$10,109,347.14	\$1,718,589.01

Assumptions:

50 space paved commuter lot expandable to 100 spaces
6" of regular excavation required over length of project and parking lot
2" of surface pavement and 6" of aggregate for paved trail section
Silt Fence required over length of project



Alternative B - Stone Dust Trail Option

Price	Item#	Description	Units	Est. Quantity	Unit Price	Extended Amount
VDOT	0100	MOBILIZATION	LS	1.00	\$300,776.28	\$300,776.28
VDOT	00101	CONST. SURVEYING	LS	1.00	\$53,619.07	\$53,619.07
VDOT	00110	CLEARING AND GRUBBING	ACRE	25.50	\$24,591.72	\$627,088.86
			Earthwork			
VDOT	00120	REGULAR EXCAVATION	CY	22556.00	\$19.56	\$441,195.36
			Trail			
VDOT	16242	AGGR. BASE MAT'L NO. 21-B	TON	7723.58	\$27.72	\$214,097.75
VDOT	10041	CO. MAT. FINE AGGR. OR AGGR. NO. 10	TON	766.67	\$91.76	\$70,349.33
VDOT	27505	Silt Fence	LF	36320.00	\$2.83	\$102,785.60
		Bridg	e over Rivanna			
VDOT		Trail Bridge (445' x 15")	SF	6675.00	\$250.00	\$1,668,750.00
			Parking Lot			
VDOT	16242	AGGR. BASE MAT'L NO. 21-B	TON	797.54	\$27.72	\$22,107.92
VDOT	16335	ASPHALT CONCRETE TY. SM-9.5A	TON	174.17	\$72.61	\$12,646.24
VDOT	16373	ASPHALT CONCRETE TY. IM-19.0A	TON	232	101.31	\$23,526.43
VDOT	12600	STD. COMB. CURB & GUTTER CG-6	LF	500	17.23	\$8,615.00
			Drainage			
		STORMWATER FACILITIES	LS	1.00	\$250,000.00	\$250,000.00
		CULVERT EXTENSIONS	EA	6.00	\$100,000.00	\$600,000.00
		DOUBLE BOX CULVERT	LS	1.00	\$1,000,000.00	\$1,000,000.00
			Traffic			
VDOT	54042	TY. B PAVEMENT LINE MARKING 24"	LF	100.00	The second secon	\$496.00
		HAWK TRAFFIC SIGNALIZATION	LS	1.00	\$200,000.00	\$200,000.00
			enance of Traffic			
		MOT	LS	1.00	\$100,000.00	\$100,000.00
			Utilities			
PCES		UTILITIES (CONSTR.)	LS	1.00	\$0.00	\$20,248.08
			ncidentals			
		Incidentals (20%)	LS		\$1,072,381.32	\$1,072,381.32
-	·				SUBTOTAL:	\$6,788,683.24

Contingency (20%) \$1,357,736.65 CEI (20%) \$1,357,736.65 TOTAL \$9,504,156.53





UPC: ****

UTILITIES ESTIMATE Project No.: ** MISSING DATA ** A. ELECTRICAL **Transmission** Computed RW or Type No Entry Number Rural Percent Total to RW to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project \$0 Computed RW Rural 100% \$0 \$0 В Computed RW Rural 100% \$0 \$0 \$0 С Computed RW Rural 100% \$0 \$0 \$0 Computed Rural 100% \$0 \$0 \$0 **Distribution - Aerial** No Entry to RW Computed RW or Туре Number Rural Percent Total to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project Computed RW Single Phase Rural 100% \$5.544 \$5,544 \$0 Computed RW Rural 100% \$0 \$0 \$0 G Computed RW Rural 100% \$0 \$0 \$0 Н Computed RW Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 Rural 100% \$5,544 \$5,544 \$0 **Distribution - Underground - by Linear Foot** Computed RW or Type No Entry Total Percent Total to RW to Const or User Const of Service Required Length(ft) VDOT Cost Project Project \$18,769 Computed RW Single Phase 200 100% \$18,769 \$0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed 100% \$0 \$18,769 \$18,769 \$0 Distribution - Underground - by Pole Equivalent RW or No Entry to RW Computed Equivalent Type Equiv. # Percent Total to Const or User Const of Pole Required of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Q Computed RW 100% \$0 \$0 \$0 100% \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** RW or No Entry to RW Computed Total Percent Total to Const Type Project \$0 Required Project or User Const of Service Length(ft) VDOT Cost \$0 Computed Computed RW RW 100% 100% \$0 \$0 \$0 \$0 \$0 **\$**0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Computed Number Percent Total to Const Project of Manhole Required of MH's VDOT or User Cost Project Const U \$0 \$0 \$0 Computed RW RW 100% 100% \$0 \$0 \$0 Computed W RW RW 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 Computed \$0 Misc. Electrical Costs **Total to Const** TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$24,31 \$24,313 **\$**0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPHO	ONE							
A B C D	Aerial - Copper Wire Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	[Type of Cable (Pair Cable) 900 600	No Entry Required	Number of Poles 3 4	Percent VDOT 100% 100% 100% 100%	Total Cost \$15,186 \$18,801 \$0	to RW Project \$15,186 \$18,801 \$0	to Const Project \$0 \$0 \$0 \$0
E F G H	Aerial - Fiber Optic Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	<u>[</u>	Type of Cable (Optical Fiber) 144	No Entry Required	Number of Poles 2	Percent VDOT 100% 100% 100% 100%	\$33,987 Total Cost \$24,588 \$0 \$0 \$0 \$24,588	\$33,987 to RW Project \$24,588 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0 \$0 \$0
I J K L	Underground - Coppe Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW	er Wir	Type of Cable (Pair Cable) 900 600	No Entry Required	Total Length(ft) 200 200	Percent VDOT 100% 100% 100% 100%	Total Cost \$4,340 \$3,978 \$0 \$0 \$8,317	to RW Project \$4,340 \$3,978 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0
M N O P	Underground - Fiber Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	Optic	Type of Cable (Optical Fiber) 144	No Entry Required	Total Length(ft) 200	Percent VDOT 100% 100% 100% 100%	Total Cost \$22,659 \$0 \$0 \$0	to RW Project \$22,659 \$0 \$0 \$2	to Const Project \$0 \$0 \$0 \$0 \$0
Q R S T	Underground - Coppe Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW	er Wir	e - In Conduit Type of Cable (Pair Cable)	No Entry Required	Total Length(ft)	Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
U V W X	Underground - Fiber Computed RW or or User Const Computed RW Computed RW Computed RW Computed RW Computed RW	Optic	- In Conduit Type of Cable (Optical Fiber)	No Entry Required	Total Length(ft)	Percent VDOT 100% 100% 100% 100%	\$0 Total Cost \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0
Y Z	Manholes for UG Tele Computed RW or or User Const Computed RW Computed RW	E	e Service Item Telephone Manhole Telephone Manhole	No Entry Required	Quantity	Percent VDOT 100% 100%	Total Cost \$0 \$0	to RW Project \$0 \$0	to Const Project \$0 \$0
AA BB		Misc. T	elephone Costs Charged				TOTAL TELEPHONE \$89,550	Total to RW Proj \$89,550	Total to Const Proj \$0

C. CATV								
C. CATV								
Aerial CATV			Number					
Computed RW or or User Const	Type of Service	No Entry Required	of Pole Att'mnts		Percent VDOT	Total Cost	to RW Project	to Const Project
A Computed RW	OI GOITICE	rtoquilou	Attimits	1	100%	\$0	\$0	\$0
B Computed RW C Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
D Computed RW					100%	\$0		\$0 \$0
						\$0	\$0	\$0
Underground CATV Computed RW or	Туре	No Entry	Total		Percent	Total	to RW	to Const
or User Const	of Service	Required	Length(ft)	L	VDOT	Cost	Project	Project
E Computed RW F Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
G Computed RW					100%	\$0	\$0	\$0
H Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
Power Units						Ψ	ΨŪ	ΨŪ
Computed RW or		No Entry			Percent	Total	to RW	to Const
or User Const Computed RW	CATV Power Supply	Required	Quantity	1	100%	Cost \$0	Project \$0	Project \$0
J Computed RW	CATV Power Supply				100%	\$0	\$0	\$0
Misc. CATV Costs					[
						TOTAL CATV	Total to RW Proj	Total to Const Proj
	Misc. CATV Costs Charged	d to RW Project:						110
	Misc. CATV Costs Charged to	Const. Project:			1	\$0	\$0	\$0
					'			
Water Line	Diameter of Water Pipe (in)	No Entry Required	Total Length(ft)		Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0	Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
Misc. Water Costs					. [\$0 TOTAL WATER	\$0 Total to RW Proj	Total to Const
E	Misc. Water Costs Charged to	Const. Project:						,
F	Misc. Water Costs Charge	d to RW Project:				\$0	\$0	\$0
E. SANITAR	RY SEWER							
Cours Line								
Sewer Line Computed RW or	Diameter of	No Entry	Total		Percent	Total	to RW	to Const
or User Const	Sewer Pipe (in)	Required	Length(ft)		VDOT	Cost	Project	Project
A Computed Const B Computed Const	8		200		100%	\$20,248 \$0	\$0 \$0	\$20,248 \$0
C Computed Const					100%	\$0	\$0	\$0
D Computed Const					100%	\$0 \$20,248	\$0 \$0	\$0 \$20,248
Misc. Sewer Costs						TOTAL SEWER	Total to RW Proj	Total to Const
E	Misc. Sewer Costs Charged to	Const. Project:				TOTAL DETTER	. 5 10 101	Proj
F	Misc. Sewer Costs Charged	d to RW Project:				\$20,248	\$0	\$20,248

	F. NA	TURAL	GA	S / PROPANE							
	Distribution Computed	RW or		Diameter of	No Entry	Total		Percent	Total		to Const
A	Computed	RW)	Gas Line (in)	Required	Length(ft)	l	100%	Cost \$0	\$0	Project \$0
B C D	Computed Computed	RW RW RW						100% 100% 100%	\$0 \$0 \$0	\$0	\$0 \$0 \$0
								10070	\$0		\$0
	Transmiss Computed or User	RW or Const		Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost		to Const Project
E F	Computed Computed	RW RW	}	Ous Line (iii)	rtequiled	Length(it)		100% 100%	\$0 \$0		\$0 \$0
G H	Computed Computed	RW RW						100% 100%	\$0 \$0	\$0	\$0 \$0
									\$0	\$0	\$0
	Misc. Natu	ıral Gas / I	-		I to DIM Dool of				TOTAL GAS / PROPANE	Total to RW Proj	Total to Const Proj
J				c. Gas / Pro Costs Charged Gas / Pro Costs Charged to					\$0	\$0	\$0
	0 -					<u> </u>					
	G. PE		:UIVI								
	Computed or User	RW or Const		Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost		to Const Project
A B	Computed Computed	RW RW	}	Ous Line (III)	roquilou	Longar(it)		100%	\$0 \$0	\$0	\$0 \$0
C D	Computed Computed	RW RW						100% 100%	\$0 \$0		\$0 \$0
				<u></u>				<u> </u>	\$0	\$0	\$0
	Misc. Petr	oleum Co							TOTAL PETROLEUM	Total to RW Proj	Total to Const Proj
E F				. Petroleum Costs Charged etroleum Costs Charged to	_	<u> </u>			\$0	\$0	\$0
	index i debouil code charged to const. I reject.										
	H. CE										
	Cellular 16	riephone (TOTAL CELLULAR	Total to RW Proj	Total to Const
A				otal Cellular Costs Charged Cellular Costs Charged to	_				\$0	\$0	Proj \$0
В			TOLAI	Celiulai Costs Charged to	Collst. Project.					<u> </u>	
	I. ADI	DITION	4 <i>L</i> (
Com	ments:			Ado	ditional Utili	ty Costs to	Right-of-Way Project :				
	onco			Add	ditional Utili	ty Costs to	Construction Project :				
Com	ments:										
				Add	litional Utilit	y Costs to	<u>Utility Owners/Others</u> :				
Com	ments:										
					TOTAL UTIL	LITY COST - F	RIGHT-OF-WAY PROJECT				\$113,863
					TOTAL UTILI	TY COST - CO	ONSTRUCTION PROJECT				\$20,248
					TOTAL UTIL	ITY COST - <u>U</u>	TILITY OWNER / OTHERS				\$0
					GRA	ND TOTA	L UTILITY COSTS				\$134,111
											Version 3.10



Project Cost Estimating System MANUAL ESTIMATE



	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0
		ESTIMATE YEAR		AD YEAR
		FY2014	1.80%	FY2015
		\$1,710,748	PE	\$1,710,748
		\$519,371	RW	\$519,371
		\$9,504,157	CN	\$9,675,231
		\$11,734,275	TOTAL	\$11,905,350
		— • • • • • • • • • • • • • • • • • •	,	V 11,000,000
Job # Phase	Comment			Estimate
				↑ 4 740 740
PE				\$1,710,748
	18% of Constr	uction		
RW				\$405,507
	DIM A sourisitie	_		
	RW Acquisitio	<u>n</u>		J
RW				\$113,863
	Utility Relocati	on		
CN				\$9,504,157
CIV				φ9,504,157
	Quantity Take	off Estimate - Paved		
	·			
				J
				1

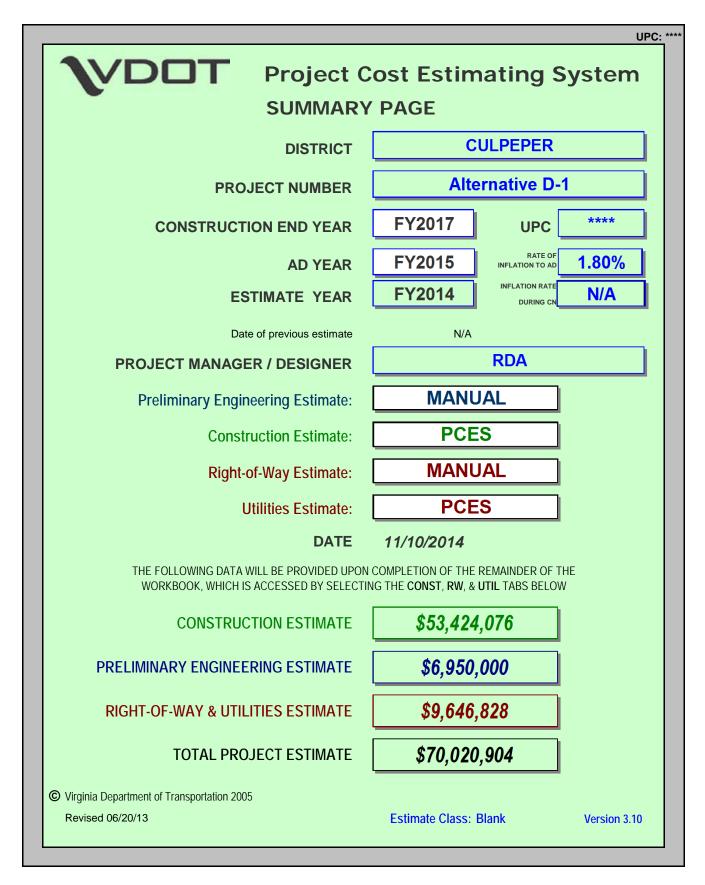
	Right of Way								
Qty.	Unit	R/W Type	Unit Price	Multiplier	Cost				
335130	SF	Fee Taking (Commercial)	\$0.44	2.75	\$405,507.30				
0	SF	Fee Taking (Residential)	\$0.50	2.75	\$0.00				
1	LS	Utility RW Project	\$0.00	1.00	\$113,863.22				
0	EA Total Take (Commercial)		\$0.00	1.00	\$0.00				
				Total	\$519,370.52				

DE	Estimate

% PE	CN	PE Cost
18%	\$9,504,156.53	\$1,710,748.18

Assumptions:

50 space paved commuter lot expandable to 100 spaces
6" of regular excavation required over length of project and parking lot
2" of surface pavement and 6" of aggregate for paved trail section
Silt Fence required over length of project



				UPC: **
TVDUI	Estimating System			VDOT
Project No.	** MISSING DATA	**		
Interstate Project ?	No			
Maintenance Project ?	No	*		
Route Number		*		
Geometric Standard	GS-7	*	Urban Collector Street	System
Ad Date	2015			
Design Year ADT		*	Project Terrain	Rolling
OR Current (Recent) ADT				
Current (Recent) ADT		*	Minimum	
Enter Design Speed (MPH) (30, 40, 45 or 50)	45	*	Design Speed =	
RRR Guidelines ? (Enter Yes or No)	No	*		
Surface Treat Only ?	No	*	Number of	Longth of Add"
Project Length (mi.)	2.12	*	Additional Lanes:	Length of Add'l. Lanes (mi.):
Total Length -Adding or Building Two Lanes (mi.)	1.55	*	None	
Total Length - Adding or Building Four Lanes (mi.)	0.57	*	None	
Total Length - Building Ramps and Loops (mi.)	0.00	*	None	
Shoulder or Curb & Gutter? (Select S or C&G)	C&G	*	Enter Lane Width (ft)	·
Median Type - Graded, Raised, or None?	N	*	Normal Lane Width(ft)	12
Number of Crossovers (Divided Highways ONLY)	0	*		
Length - Curb & Gutter - Left PLUS Right Side (ft.)	22,545		Bike/Ped Construction Co	ests (Statewide Avg.)
Length - Sidewalk - Left PLUS Right Side (ft.)	0	*	Length (ft)	18,942
Bike / Pedestrian Type	4' wide curb			
			CE Cost	\$108,826
Total Length - Raised Median (ft.)	0		PE Cost	\$101,000
Number of <u>Right Turn Lanes</u> - Left PLUS Right Side	4	*	Inflated Const.Cost	\$969,158
Number of Left Turn Lanes - (Undivided Only)	7	*	•••	CULPEPER
			90% Construction Costs	6 Cost Factor used
Signals, ITS, Signs and Lighting Costs*	\$865,876		Construction Costs Base #1 (PCES)	\$45,179,480
Signals, ITS, Signs and Lighting Costs* Cost of Large Drainage Structures	\$865,876 \$1,800,000		Construction Costs	
			Construction Costs Base #1 (PCES)	\$45,179,480
Cost of Large Drainage Structures	\$1,800,000		Construction Costs Base #1 (PCES) Base #2	\$45,179,480
Cost of Large Drainage Structures In-Plan Utility Costs*	\$1,800,000 \$1,460,842		Construction Costs Base #1 (PCES) Base #2 Enter Const CE Cost	\$45,179,480 \$1,468,916 \$0
Cost of Large Drainage Structures In-Plan Utility Costs* Adjustment for Unusual Construction Costs & Bridges	\$1,800,000 \$1,460,842		Construction Costs Base #1 (PCES) Base #2 Enter Const CE Cost CE (12.5%)	\$45,179,480 \$1,468,916 \$0 \$5,831,050
Cost of Large Drainage Structures In-Plan Utility Costs* Adjustment for Unusual Construction Costs & Bridges	\$1,800,000 \$1,460,842		Construction Costs Base #1 (PCES) Base #2 Enter Const CE Cost CE (12.5%)	\$45,179,480 \$1,468,916 \$0 \$5,831,050
Cost of Large Drainage Structures In-Plan Utility Costs* Adjustment for Unusual Construction Costs & Bridges * Totals include district factor calculations	\$1,800,000 \$1,460,842		Construction Costs Base #1 (PCES) Base #2 Enter Const CE Cost CE (12.5%)	\$45,179,480 \$1,468,916 \$0 \$5,831,050

Note: <u>Do Not Include Bridge P. E. Costs Here</u>

Roadway P. E. / Roadway Const. = 13.0%

© Virginia Department of Transportation 2005 Revised 06/20/13 Today's Date: 11/10/14

Version 3.10

Project Cost	Fatimatina Custa			OFC.			
AVDUI	t Estimating Syste TION / BRIDGE / P			VDOT			
Project No.	** MISSING DATA	4 **					
Interstate Project ?	No	*					
Route Number		*					
Geometric Standard	GS-7	*	Urban Collector Street System				
Ad Date	2015						
Design Year ADT		*	Project Terrain	Rolling			
Current (Recent) ADT							
			Minimum				
Enter Design Speed (MPH) (30, 40, 45 or 50)	45	*	Design Speed =				
RRR Guidelines ? (Enter Yes or No)	No	*					
Surface Treat Only ?	No	*	Number of Additional	Length of Add'l.			
Project Length (mi.)	0.26	*	Lanes:	Lanes (mi.):			
Total Length -Adding or Building <u>Two Lanes</u> (mi.)	0.26	*	None				
Total Length - Adding or Building Four Lanes (mi.)	0.00	*	None				
Total Length - Building Ramps and Loops (mi.)	0.00	*	None				
Shoulder or Curb & Gutter ? (Select S or C&G)	C&G	*	Enter Lane Width (ft.)				
Median Type - Graded, Raised, or None ?	N	*	Normal Lane Width (ft.)	12			
Number of Crossovers(Divided Highways ONLY)	0	*					
Length - Curb & Gutter - Left PLUS Right Side (ft.)	2,680						
Length - Sidewalk - Left PLUS Right Side (ft.)	0						
Bike / Pedestrian Type	None	, î					
Total Length - Raised Median (ft.)	0						
Number of <u>Right Turn Lanes</u> - Left PLUS Right Side	3	*		Project Location:			
Number of Left Turn Lanes - (Undivided Only)	2	*		CULPEPER			
			Construction Costs				
			Base #2	\$1,468,916			
Virginia Department of Transportation 2005 Revised 06/20/13	Today's Date:	11/	10/14	Version 3.10			

VDOT	Project Cost Estimating System Miscellaneous Cost Estimates	VDOT
	COST OF LARGE DRAINAGE STRUCTURES	
Job# Descript	ion	Cost ()
Box Culv	ert	\$1,800,000
		_
		\$1,800,000
, , , , , , , , , , , , , , , , , , ,	ADJUSTMENT FOR UNUSUAL CONSTRUCTION COSTS	8
Туре	Description	Cost ()
Other	Stormwater Management (SWM Facilities).	\$1,800,000
Maintenance of Traffic	MOT Costs	\$1,000,000
Other	Bridges (58,320 SF @ \$325 /SF)	\$18,954,000
Other	Earthwork due to difficult terrain	\$5,000,000
Other	Retaining walls	\$3,000,000
Other	Shared-use path	\$1,662,979
		_
		<u> </u>
		<u> </u>
		-
		-
		
		-
		-
		-
	 	
		\$31,416,979

		SIGN	ALS,	ITS,	SIGNS	San	d LIG	HTII	NG C	OST	「WORKSHI	EET		
Stand Alone Traffic Projec	t:	No	1											UPC: ****
			•											
SIGNALS Permanent Signals	New/ Mod.	Intersection	Direction		ajor Direction	Lanca	Direction	Cro		lı anaa	Poles	Detection	Pre-emption	Cost
		Туре	Direction	Lanes	Direction	Lanes	Direction	Lanes	Direction	Lanes	Foles	Detection	Pre-empuor	i Cosi
Location/Description 1 John Warner Pkwy	New	Four-way	West	3	East	3	South	2	North	3	Comb. M.A. Lighting	Video	Yes	\$224,942
2 Rio Road	New	Tee	West	0	East	2	South	3	North	2	Comb. M.A. Lighting	Video	Yes	\$203,260
3 Stony Point Rd	New	Four-way	South	3	North	3	East	3	West	3	Comb. M.A. Lighting	Video	Yes	\$228,942
4 Pen Park Rd	New	Four-way	South	4	North	4	East	1	West	2	Comb. M.A. Lighting	Video	Yes	\$224,942
5														\$0
6														\$0
8													1	\$0 \$0
9														\$0
10														\$0
													Quantity	Cost
									Tempora	rv Siar	nals - New Equipment		1	\$55,000
											nals - Modified Equipn		1	\$25,000
									· opo.a.	. , c.g.	alo illouillou Equipi		· · · · · · · · · · · · · · · · · · ·	\$20,000
	Locatio	n/Description	,											Cost
	Locatio	II/Description	ı										1	Cost
MISCELLANEOUS 1														
SIGNAL WORK 2	<u> </u>													
											Signa	als Construc	ction Subtota	
<u>ITS</u>	Locatio	n/Description	1										7	Cost
ITS WORK 1													_	
2													J	
											l l	TS Construc	ction Subtota	I \$0
MAJOR SIGN STRUCTURE	ES						Lighted							Extended
Type of Sign		Comment		_	Quantity	Unit	Y/N	_			Cost/Sigr	n	_	Cost
1						Ea.								
2						Ea.		ļ.						
3						Ea. Ea.								
5						Ea.		ł						
6						Ea.		1						
7						Ea.]						
	Locatio	n/Description	1										7	Cost
MISCELLANEOUS 1														
SIGN WORK 2	<u> </u>												_	
											Sig	ns Construc	ction Subtota	\$0
LIGHTING														
Continuous Roadwa												Number		
	Urban 1	ype of Lighti	ng	Comme	ents				N	o. Lan	es	of Miles	-	Cost
1												Number		\$0
	Freewa	y Type of Lig	htina	Comme	nts				N	o. Lan	es	of Miles		Cost
1	1.00.00	, .,po o. <u>g</u> .	9								Ĭ	0	1	\$0
												Number of		
Interchange	Interch	ange Type			Тур	e of Ligl	hting		1			Interchange	S	Cost
1														\$0
2														\$0 \$0
3														Ψ0
Miscellaneous	Locatio	n/Description	1											Cost
1														
2	Щ_											0	tion C. I to t	
											Lighti		ction Subtota	
													CTION TOTAL	
									District fact	tor will b	e applied when the total c	ost is passed	to the const-1 w	orksheet
PROJECT COMMEN	TS													7
														_
Prepared by				Dat	e Prepared/N	Modified:								Version 3.10

21			_
-	/ 🌙	ш	
		_	



UPC: ****

UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL Transmission Computed Type No Entry Number Rural Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project RW Wood 3 Rural 100% \$162,705 \$162,705 \$0 Computed В \$0 \$0 \$0 Computed Rural RW Rural 100% \$0 \$0 \$0 Computed \$0 \$0 \$162,705 \$162,705 \$0 **Distribution - Aerial** Computed No Entry Number Rural Percent Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project Project RW Single Phase Rural 100% \$16,631 \$16,631 \$0 Computed Computed 21 Rural \$232,859 \$232,859 \$0 G Computed RW Rural 100% \$0 \$0 \$0 H Computed Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 \$249,490 \$249,490 \$0 Distribution - Underground - by Linear Foot RW or Туре No Entry Total Percent Total to RW to Const or User of Service Length(ft) VDOT Cost Project Project \$0 \$0 Computed RW 100% \$0 Computed 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$0 Distribution - Underground - by Pole Equivalent No Entry to RW to Const Computed RW or **Equivalent Type** Equiv.# Percent Total or User of Pole of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 50 Computed RW 100% \$0 \$0 50 Q Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** No Entry RW or to RW to Const Computed Type Total Percent Total Project \$0 or User Const of Service Length(ft) VDOT Cost Project \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Number Percent Total to Const of MH's of Manhole VDOT Project Cost Project or User U \$0 100% 100% \$0 Computed RW \$0 \$0 \$0 Computed \$0 W 100% \$0 \$0 50 Computed RW Misc. Electrical Costs Total to Const TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$412,194 \$412,194 \$0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPH	ON	E							
	Aerial - Copper Wire									
	Computed RW or		Type of Cable	No Entry	Number		Percent	Total	to RW	to Const
	or User Const	г	(Pair Cable) 900	Required	of Poles	h	VDOT	Cost	Project	Project
A B	Computed RW Computed RW	-	900		67		100%	\$339,155 \$0	\$339,155 \$0	\$0 \$0
C	Computed RW	ŀ					100%	\$0	\$0 \$0	\$0 \$0
D	Computed RW	-					100%	\$0	\$0	\$0 \$0
	Compared 1411			<u> </u>	<u> </u>	J	10070	\$339,155	\$339,155	\$0
	Assist Fiber Ontic							ψ000,100	ψοσο, 100	Ų0
	Aerial - Fiber Optic Computed RW or		Toma of Cabla	No Enter	Number		Percent	Total	4- DW	to Const
	Computed RW or or User Const		Type of Cable (Optical Fiber)	No Entry Required	of Poles		VDOT	Cost	to RW Project	
Е	Computed RW	Г	144	Nequileu	48	ì	100%	\$590,102	\$590,102	Project \$0
F	Computed RW	ŀ	177		70		100%	\$0	\$0	\$0
G	Computed RW						100%	i so	\$0	\$0
H	Computed RW	ı					100%	\$0	\$0	<u>\$0</u>
							_	\$590,102	\$590,102	\$0
	Underground - Coppe	er Wii	re					,,	,	
	Computed RW or		Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
	or User Const		(Pair Cable)	Required	Length(ft)		VDOT	Cost	Project	Project
1	Computed RW	Γ	(run ouble)	rtoquilou	Longan(it)	Ì	100%] \$0	\$0	\$0
J	Computed RW						100%	\$0	\$0	\$0
K	Computed RW						100%	\$0	\$0	\$0
L	Computed RW						100%	\$0	\$0	\$0
	Underground - Fiber	Optic	;					\$0	\$0	\$0
	Computed RW or		Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
	or User Const	_	(Optical Fiber)	Required	Length(ft)		VDOT	Cost	Project	Project
M	Computed RW						100%	\$0	\$0	\$0
N	Computed RW						100%	\$0	\$0	\$0
0	Computed RW	-					100%	\$0	\$0	\$0
Р	Computed RW						100%	\$0	\$0	\$0
								\$0	\$0	\$0
	Underground - Coppe	er Wii	re - In Conduit							
	Computed RW or		Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
	or User Const	_	(Pair Cable)	Required	Length(ft)	L.	VDOT	Cost	Project	Project
Q	Computed RW	-					100%	\$0	\$0	\$0
R	Computed RW	-					100%	\$0	\$0	\$0
S	Computed RW	-					100%	\$0	\$0	\$0
Т	Computed RW						100%	\$0	\$0	<u>\$0</u>
	Underground - Fiber	Optic						\$0	\$0	\$0
	Computed RW or		Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
40	or User Const	r	(Optical Fiber)	Required	Length(ft)	1	VDOT	Cost	Project	Project
U	Computed RW	8	144		3,450		100%	\$482,336	\$482,336	SO SO
V	Computed RW Computed RW	- 6					100%	\$0 \$0	\$0 \$0	\$0 \$0
X	Computed RW	Ť.					100%	\$0	\$0	\$0 \$0
-	ZAIIIMANA 1741	_					10076	\$482,336	\$482,336	\$0
	Manholes for UG Tele	ephor	ne Service					9402,330	9402,330	\$0
	Computed RW or	pilot		No Entry			Percent	Total	to RW	to Const
	or User Const		Item	Required	Quantity		VDOT	Cost		Project
Y	Computed RW	٦	Telephone Manhole	raquisi	- Committy	ì	100%	\$0	\$0	\$0
Z	Computed RW		Telephone Manhole			1	100%	\$0	\$0	\$0
	Misc Telephone Cos	te	***			•				
	Misc. Telephone Cos	19						TOTAL TELEPHONE	Total to PAU Day	Total to Const
100,000		WATER ST						TOTAL TELEPHONE	Total to RW Proj	Proj
AA		Misc.	Telephone Costs Charge	d to RW Project:						1000
								\$1,411,594	\$1,411,594	50
BB	Mi	sc. Tel	ephone Costs Charged to	Const. Project:				91,411,094	\$1,411,004	\$0
2								~		

C. CATV			(A.) [7]					
Aerial CATV Computed RW or	T	No Entry	Number of Pole		Percent	Total	to RW	to Cons
Computed RW or or User Const	Type of Service	Required	Att'mnts		VDOT	Cost	Project	Projec
A Computed RW B Computed RW	.650 Coax		96		100%	\$63,607	\$63,607	S
C Computed RW	9				100%	\$0 \$0	\$0 \$0	9
D Computed RW					100%	\$63,607	\$63,607	
Underground CATV Computed RW or	Туре	No Entry	Total		Percent	Total	to RW	to Con
or User Const	of Service	Required	Length(ft)	20	VDOT	Cost		Proje
E Computed RW					100%	\$0	\$0	
F Computed RW G Computed RW					100%	\$0 \$0	\$0 \$0	
H Computed RW]	100%	\$0 \$0	\$0 \$0	
Power Units		11.5						
Computed RW or or User Const	Item	No Entry Required	Quantity		Percent VDOT	Total Cost	to RW Project	to Con Proje
I Computed RW	CATV Power Supply			1	100%	\$0	\$0	
J Computed RW	CATV Power Supply			1	100%	\$0	\$0	
Misc. CATV Costs					1	TOTAL CATV	Total to RW Proj	Total to Cons
	Misc. CATV Costs Charge	d to RW Project:					-	
	Misc. CATV Costs Charged to	Const. Project:]	\$63,607	\$63,607	
B Computed Const C Computed Const	Diameter of Water Pipe (in)	No Entry Required	Total Length(ft) 5,200		Percent VDOT 100% 100% 100% 100%	Total Cost \$1,347,463 \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Cor Proje \$1,347.4
Water Line Computed RW or or User Const A Computed Const C Computed Const C Computed Const C Computed Const D Computed Const Misc. Water Costs	Diameter of Water Pipe (in) 20	No Entry Required	Length(ft)		100% 100% 100%	Total Cost \$1,347,463 \$0 \$0	to RW Project \$0 \$0 \$0	to Coi Proje \$1,347,4 \$1,347,4
Water Line Computed RW or or User Const A Computed Const B Computed Const C Computed Const C Computed Const D Computed Const	Diameter of Water Pipe (in)	No Entry Required	Length(ft)		100% 100% 100%	Total Cost \$1,347,463 \$0 \$0 \$0 \$1,347,463	to RW Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj	to Cor Proje \$1,347,41 \$1,347,41 Total to Const
Water Line Computed RW or or User Const A Computed Const Computed Const Computed Const Computed Const Computed Const Misc. Water Costs E	Diameter of Water Pipe (in) 20 Misc. Water Costs Charged to	No Entry Required	Length(ft)		100% 100% 100%	Total Cost \$1,347,463 \$0 \$0 \$1,347,463	to RW Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0	

Total to Const Proj

\$275,694

Total to RW Proj

TOTAL SEWER

\$275,694

Misc. Sewer Costs

Misc. Sewer Costs Charged to Const. Project:

Misc. Sewer Costs Charged to RW Project:

	F. NAT	TURAL (GAS / PROPANE							
A B C D	Computed Computed Computed Computed Computed Computed Computed Computed	RW or Const RW RW RW	Diameter of Gas Line (in) 4	No Entry Required	Total <u>Length(ft)</u> 1,525		Percent VDOT 100% 100% 100% 100%	Total Cost \$82,713 \$0 \$0	to RW Project \$82,713 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
E F	Transmissi Computed or User Computed Computed	RW or Const RW RW	Diameter of Gas Line (in)	No Entry Required	Total Length(fl)		Percent VDOT 100% 100%	\$82,713 Total Cost \$0 \$0	\$82,713 to RW Project \$0 \$0	to Const Project \$0 \$0
G H	Computed Computed	RW RW	opane Costs				100%	\$0 \$0 \$0	\$0 \$0 Total to RW Proj	\$0 \$0 \$0
J			Misc. Gas / Pro Costs Charged sc. Gas / Pro Costs Charged to					\$82,713	\$82,713	Proj \$0
		TROLEU	JM							
A B C D	Computed or User Computed Computed Computed Computed Computed	RW or Const RW RW RW RW	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
E F	Misc. Petro	1	s Misc. Petroleum Costs Charged cc. Petroleum Costs Charged to					TOTAL PETROLEUM \$0	\$0 Total to RW Proj	Total to Const Proj
		LLULAR		"						
A B	Cellular Te		Osts Total Cellular Costs Charged Total Cellular Costs Charged to	- 1				TOTAL CELLULAR	Total to RW Proj \$0	Total to Const Proj \$0
	I. ADD	OITIONA	L COSTS	ditional Utilit	ty Costs to	Right-of-Way Project				
Com	ments:		Ad	ditional Utilit	ty Costs to	Construction Project				
	ments:		Ado	litional Utility	y Costs to <u>l</u>	Utility Owners/Others				
Com	ments:									
						NIGHT-OF-WAY PROJECT				1,970,109
						ONSTRUCTION PROJECT FILITY OWNER / OTHERS			\$	\$0
						L UTILITY COSTS			\$	3,593,266
										Version 3 10



Project Cost Estimating System MANUAL ESTIMATE



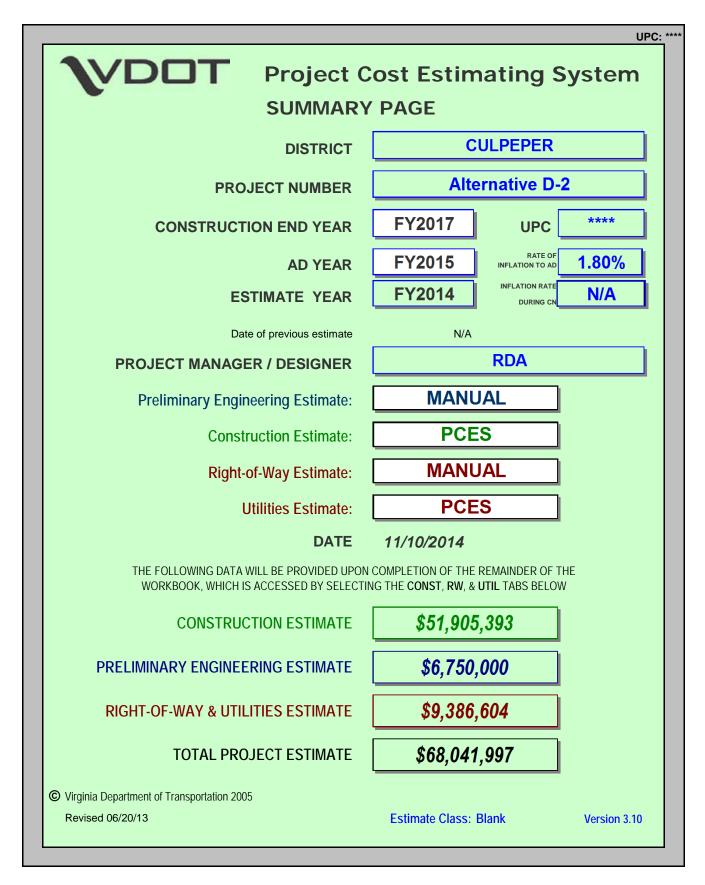
	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

EXPENDITU	RES		\$0	\$0	\$0	
RUMS	-			\$0	r o	
TRNS*PORT AWARD					\$0 \$0	
PROJECTIO	N				\$0 \$0	
			STIMATE YEAR		AD YEAR	J
		Г	FY2014	1.80%	FY2015	
			\$6,950,000	PE	\$6,950,000	
			\$9,646,828	RW	\$9,646,828	
			\$0	CN	\$0	
			\$16,596,828	TOTAL	\$16,596,828	
Job# Ph	nase	Comment			Estimate	
J0D# PI	iase	Comment			Estimate	1
PE					\$6,950,000	
		PE Cost Estimat	e [13% (rounded) c	of CN1		
		T E GOSt Estimat	e [1070 (rounded) e	or Ortj		-
R\	W				\$785,280	
		Relocations/Tota	l Takes			
	· · ·					Ī
R\	W				\$6,891,439	
		R/W Total Costs	3			
R\	٨/				\$1,970,109	
	V V				\$1,970,109	
		Utilities to be incl	uded in the right of	way estimate		

Relocations input from	ROW Dept	3 takes
------------------------	----------	---------

\$785,280

SF of Commercial SF of Residential	SF 0 778,254	Cost/SF \$0.00 \$3.22	Multiplier 2.75 2.75 TOTAL	Cost \$0 \$6,891,439 \$6,891,439
PE Cost Calc	C \$53,42	• •	PE % 13%	PE \$6,950,000



				UPC: **
	Estimating System ION / BRIDGE / PE			VDOT
Project No.	** MISSING DATA	A **	4	
Interstate Project ?	No			
Maintenance Project ?	No	*		
Route Number		*		
Geometric Standard	GS-7	*	Urban Collector Stree	t System
Ad Date	2015			
Design Year ADT		*	Project Terrain	Rolling
OR Current (Recent) ADT				
Current (Recent) ADT		*	Minimum	
Enter Design Speed (MPH) (30, 40, 45 or 50)	45	*	Design Speed =	
RRR Guidelines ? (Enter Yes or No)	No	*		
Surface Treat Only ?	No	*	Number of	Length of Add'l.
Project Length (mi.)	2.04	*	Additional Lanes:	Lanes (mi.):
Total Length -Adding or Building <u>Two Lanes</u> (mi.)	1.47	*	None	
Total Length - Adding or Building Four Lanes (mi.)	0.57	*	None	
Total Length - Building Ramps and Loops (mi.)	0.00	*	None	
Shoulder or Curb & Gutter? (Select S or C&G)	C&G	*	Enter Lane Width (ft)	>
Median Type - Graded, Raised, or None?	N	*	Normal Lane Width(ft)	12
Number of Crossovers (Divided Highways ONLY)	0	*		
Length - Curb & Gutter - Left PLUS Right Side (ft.)	21,851		Bike/Ped Construction C	Costs (Statewide Avg.)
Length - Sidewalk - Left PLUS Right Side (ft.)	0	*	Length (ft)	19,386
Bike / Pedestrian Type	4' wide curb			
			CE Cost	\$111,167
Total Length - Raised Median (ft.)	0		PE Cost	\$104,000
Number of Right Turn Lanes - Left PLUS Right Side	4	*	Inflated Const.Cost	\$991,661
Number of Left Turn Lanes - (Undivided Only)	6	*	90	COLPEPER
			Construction Costs	% Cost Factor used
Signals, ITS, Signs and Lighting Costs*	\$1,045,210		Base #1 (PCES)	\$43,978,044
Cost of Large Drainage Structures	\$910,975		Base #2	\$1,344,281
In-Plan Utility Costs*	\$1,460,842		Enter Const CE Cos	t > \$0
Adjustment for Unusual Construction Costs & Bridges	\$31,316,967		CE (12.5%)	\$5,665,291
* Totals include district factor calculations			Estimate (2014)	\$50,987,616
Additional (or Unusual) P. E. Costs				
Select % of PE to be performed by Consultants	100%		PE Cost	\$6,228,647

Note: <u>Do Not Include Bridge P. E. Costs Here</u>

Roadway P. E. / Roadway Const. = 13.0%

© Virginia Department of Transportation 2005 Revised 06/20/13 Today's Date: 11/10/14

Version 3.10

D. L. (A.)				OFG.
AVDU I	t Estimating Syste TION / BRIDGE / P			VDOT
Project No.	** MISSING DATA	A **		
Interstate Project ?	No	*		
Route Number		*		
Geometric Standard	GS-7	*	Urban Collector Street Sys	stem
Ad Date	2015			
Design Year ADT		*	Project Terrain	Rolling
Current (Recent) ADT				
			Minimum	
Enter Design Speed (MPH) (30, 40, 45 or 50)	45	*	Design Speed =	
RRR Guidelines ? (Enter Yes or No)	No	*		
Surface Treat Only ?	No	*	Number of Additional	Length of Add'l.
Project Length (mi.)	0.29	*	Lanes:	Lanes (mi.):
Total Length -Adding or Building <u>Two Lanes</u> (mi.)	0.29	*	None	
Total Length - Adding or Building Four Lanes (mi.)	0.00	*	None	
Total Length - Building Ramps and Loops (mi.)	0.00	*	None	
Shoulder or Curb & Gutter ? (Select S or C&G)	C&G	*	Enter Lane Width (ft.)	
Median Type - Graded, Raised, or None ?	N	*	Normal Lane Width (ft.)	12
Number of Crossovers(Divided Highways ONLY)	0	*		
Length - Curb & Gutter - Left PLUS Right Side (ft.)	3,084			
Length - Sidewalk - Left PLUS Right Side (ft.)	0			
Bike / Pedestrian Type	None	^		
Total Length - Raised Median (ft.)	0			
Number of <u>Right Turn Lanes</u> - Left PLUS Right Side	2	*		Project Location:
Number of Left Turn Lanes - (Undivided Only)	1	*		CULPEPER
			Construction Costs	
			Base #2	\$1,344,281
Virginia Department of Transportation 2005 Revised 06/20/13	Today's Date:	11/	10/14	Version 3.10

VDOT	Project Cost Estimating System Miscellaneous Cost Estimates	VDOT
	COST OF LARGE DRAINAGE STRUCTURES	
Job# Descript	ion	Cost ()
Box Culv	ert	\$910,975
		\$910,975
A	DJUSTMENT FOR UNUSUAL CONSTRUCTION COST	8
Туре	Description	Cost ()
Other	Stormwater Management (SWM Facilities)	\$2,500,000
Maintenance of Traffic	MOT Costs	\$250,000
Other	Bridges (58,320 SF @ \$325 /SF)	\$18,954,000
Other	Earthwork due to difficult terrain	\$5,000,000
Other	Retaining walls	\$3,000,000
Other	Shared-use path	\$1,612,967
		_
		-
		-
		-
		-
	 	
		\$31,316,967

			SIGN	ALS,	ITS,	SIGN	San	d LIG	HTI	NG C	OST	WORKSHE	EET		
Stan	d Alone Traffic Projec	et:	No]											UPC: ****
SIGN	IALS nanent Signals	New/ Mod.	Intersection Type	Direction		ajor Direction	Lange	Direction	Cro		l ange	Poles	Detection	Pre-emption	Cost
ı em	Location/Description		Туре	Direction	Lanes	Direction	Lanes	Direction	Laries	Direction	Laries	1 oles	Detection	i re-emption	0031
1	John Warner Pkwy	New	Four-way	West	3	East	3	South	2	North	3	Comb. M.A. Lighting	Video	Yes	\$224,942
2	Rio Road	New	Tee	West	0	East	2	South	3	North	2	Comb. M.A. Lighting	Video	Yes	\$203,260
3	Stony Point Rd	New	Four-way	South	3	North	3	East	2	West	2	Comb. M.A. Lighting	Video	Yes	\$220,942
4	Pen Park Rd	New	Four-way	South	4	North	4	East	1	West	2	Comb. M.A. Lighting	Video	Yes	\$224,942
5	Stony Point Rd	New	Tee	South	3	North	3	East	2			Comb. M.A. Lighting	Video	Yes	\$207,260
6															\$0
/ 8														+	\$0 \$0
9															\$0
10															\$0
														Quantity	Cost
										Tempora	ry Sign	als - New Equipment		1	\$55,000
												als - Modified Equipn		1	\$25,000
										· opo.a.	, o.g.	alo ilioanioa Equipii			+20,000
		Locatio	n/Description	,											Cost
MICC		Locatio	il/Description											1	COST
	ELLANEOUS 1													-	
SIGN	IAL WORK 2													J	
			-									Signa	als Construc	ction Subtotal	
<u>ITS</u>	ITC WORK 4	Locatio	n/Description	1										1	Cost
	ITS WORK 1													-	
	-														
												Г	TS Construc	ction Subtotal	\$0
MAJ	OR SIGN STRUCTURI	E <u>S</u>						Lighted							Extended
	Type of Sign	•	Comment			Quantity		Y/N				Cost/Sigr	1	_	Cost
1							Ea.		ļ.					4	
2							Ea. Ea.								
4							Ea.		1						
5							Ea.		1						
6							Ea.							i e	
7					J		Ea.							1	
MISC	ELLANEOUS 1	Locatio	n/Description	1										1	Cost
	I WORK 2													-	
0.0.														_	
												Sig	ns Construc	ction Subtotal	\$0
LIGH	ITING														
	Continuous Roadwa		Tune of Liabti	n.a	Comme	mto				N.	a Lan		Number		Coot
	1	Urban	Type of Lighti	ng	Comme	HILS				IN	o. Lan	#5 	of Miles	1	Cost \$0
	·												Number	-	
		Freewa	y Type of Lig	hting	Comme	ents				N	o. Lan	es	of Miles	<u>L</u> .	Cost
	1				<u> </u>								L		\$0
	Interchange	Intorob	anga Tima			Tim	e of Ligi	htina					Number of		Cost
	Interchange	merch	ange Type		1	Тур	e or Ligi	nung				'	Interchange	ì	\$0
	2													-	\$0
	3														\$0
															0
	Miscellaneous	Locatio	n/Description)										1	Cost
	2													-	
												Lightin	ng Construc	ction Subtotal	\$0
														CTION TOTAL	
										District fact	or will b	e applied when the total c			
	PROJECT COMMEN	TS								District IdCl	or Will D	o applied when the total o	ουι το μασσεία Ι	o are const-1 W	JINGIIGG!
															J
	Dronorod by			1	D-4	to Droporosia	Andifind								Version 2.10
	Prepared by				Dat	te Prepared/N	noaified:								Version 3.10

_				
-	~/			т
A	V	\boldsymbol{L}	_	



UPC: ****

UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL Transmission Computed Type No Entry Number Rural Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project RW Wood 3 Rural 100% \$162,705 \$162,705 \$0 Computed В \$0 \$0 \$0 Computed Rural RW Rural 100% \$0 \$0 \$0 Computed \$0 \$0 \$162,705 \$162,705 \$0 **Distribution - Aerial** Computed No Entry Number Rural Percent Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project RW Single Phase Rural 100% \$16,631 \$16,631 \$0 Computed Computed Rural \$299,390 \$299,390 \$0 G Computed RW Dual Three Phase Rural 100% \$30,492 \$30,492 \$0 H Computed Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 \$346,513 \$346,513 \$0 Distribution - Underground - by Linear Foot RW or Туре No Entry Total Percent Total to RW to Const or User of Service Length(ft) VDOT Cost Project Project \$0 \$0 Computed RW 100% \$0 Computed 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$0 Distribution - Underground - by Pole Equivalent No Entry to RW to Const Computed RW or **Equivalent Type** Equiv.# Percent Total or User of Pole of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 50 Computed RW 100% \$0 \$0 50 Q Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** No Entry RW or to RW to Const Computed Type Total Percent Total Project \$0 or User Const of Service Length(ft) VDOT Cost Project \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Number Percent Total to Const of MH's of Manhole VDOT Project Cost Project or User U \$0 100% 100% \$0 Computed RW \$0 \$0 \$0 Computed \$0 W 100% \$0 \$0 50 Computed RW 100% Misc. Electrical Costs Total to Const TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$509,217 \$509,217 \$0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPHO	ONE								
	Aerial - Copper Wire									
	Computed RW or		of Cable	No Entry	Number		Percent	Total	to RW	to Const
	or User Const		ir Cable) 900	Required	of Poles	\	VDOT	Cost	Project	Project
A B	Computed RW Computed RW		900		71		100%	\$359,403 \$0	\$359,403 \$0	\$0 \$0
C	Computed RW						100%	\$0	\$0	\$0 \$0
D	Computed RW						100%	\$0	\$0	\$0 \$0
	Compated			<u> </u>	<u> </u>		10070	\$359,403	\$359,403	\$0
	Assist Fiber Ontic							4000,400	4000,400	Ų0
	Aerial - Fiber Optic Computed RW or	T	-fC-bl-	No Fater	Number		Percent	Total	4- DW	to Const
	Computed RW or or User Const		e of Cable ical Fiber)	No Entry Required	of Poles		VDOT	Cost	to RW Project	
Е	Computed RW		144	Nequileu	54	1	100%	\$663,865	\$663,865	Project \$0
F	Computed RW		177		- 51		100%	\$0	\$0	\$0
G	Computed RW						100%	i \$0	\$0	\$0
H	Computed RW						100%	\$0	\$0	\$0
							_	\$663,865	\$663,865	\$0
	Underground - Coppe	er Wire								
	Computed RW or		of Cable	No Entry	Total		Percent	Total	to RW	to Const
	or User Const	• • • • • • • • • • • • • • • • • • • •	ir Cable)	Required	Length(ft)		VDOT	Cost	Project	Project
1	Computed RW		•				100%	\$0	\$0	\$0
J	Computed RW						100%	\$0	\$0	\$0
K	Computed RW						100%	\$0	\$0	\$0
L	Computed RW						100%	\$0	\$0	\$0
	Underground - Fiber (•						\$0	\$0	\$0
	Computed RW or		of Cable	No Entry	Total		Percent	Total	to RW	to Const
	or User Const	(Opti	ical Fiber)	Required	Length(ft)		VDOT	Cost	Project	Project
M	Computed RW						100%	\$0	\$0	\$0
N	Computed RW						100%	\$0	\$0	\$0 *0
O P	Computed RW Computed RW						100%	\$0 \$0	\$0 \$0	\$0 \$0
F	Computed RVV			<u> </u>			100%	\$0	\$0 \$0	\$0 \$0
	Underground Conne	r Wire In C	ondult					φυ	φυ	ΨU
	Underground - Coppe			No Fotos	Total		D	Total	4- DW	4- 0
	Computed RW or or User Const		of Cable	No Entry	Total		Percent VDOT	Total	to RW	to Const
Q	or User Const Computed RW	(Pa	ir Cable)	Required	Length(ft)	1	100%	Cost \$0	Project \$0	Project \$0
R	Computed RW						100%	\$0	\$0	\$0 \$0
S	Computed RW						100%	\$0	\$0	\$0
Ť	Computed RW						100%	i so	\$0	\$0
								\$0	\$0	\$0
	Underground - Fiber (Optic - In Cor	nduit							
	Computed RW or		of Cable	No Entry	Total		Percent	Total	to RW	to Const
100	or User Const		ical Fiber)	Required	Length(ft)		VDOT	Cost	Project	Project
U	Computed RW		144		3,450		100%	\$482,336	\$482,336	\$0
٧	Computed RW						100%	\$0	\$0	\$0
W	Computed RW	- 9					100%	\$0	\$0	\$0
X	Computed RW						100%	\$0	\$0	\$0
								\$482,336	\$482,336	\$0
	Manholes for UG Tele	phone Servi	Ce	Tara Caracteristics						NAME AND ADDRESS OF THE PARTY O
	Computed RW or		h	No Entry			Percent	Total	to RW	to Const
	or User Const		Item	Required	Quantity	V.	VDOT	Cost	Project	Project
Y Z	Computed RW Computed RW		one Manhole one Manhole				100%	\$0 \$0	\$0	\$0 \$0
4	Computed KW	тенерпо	one iviannole				100%	20	\$0	\$0
	Misc. Telephone Cost	le le								
	misc. reteptione Cost	13						TOTAL TELEPHONE	Total to DW Day	Total to Const
20000								TOTAL TELEPHONE	Total to RW Proj	Proj
AA		Misc. Telephone	Costs Charge	a to RW Project:						
10000	1.8		ON THE RESERVE AND THE					\$1,505,605	\$1,505,605	\$0
BB	Mis	sc. Telephone Co	osts Charged to	Const. Project:				\$1,000,000	\$1,000,000	40
2								~		

C. CATV							
Aerial CATV Computed RW or	T	No Entry	Number of Pole	Percent	Total	to RW	to Cons
Computed RW or or User Const	Type of Service	Required	Att'mnts	VDOT	Cost	Project	Projec
A Computed RW B Computed RW	.650 Coax		98	100%	\$64,932		S
C Computed RW	9			100%	\$0 \$0	\$0 \$0	9
D Computed RW				 100%	\$64,932	\$64,932	
Underground CATV Computed RW or	Туре	No Entry	Total	Percent	Total	to RW	to Con
or User Const	of Service	Required	Length(ft)	VDOT	Cost		Proje
E Computed RW F Computed RW				100%	\$0	\$0 \$0	
G Computed RW				100%	\$0		
H Computed RW			-	 100%	\$0 \$0	\$0 \$0	
Power Units Computed RW or		No Entry		Percent	Total	to RW	to Con
or User Const	ltem	Required	Quantity	VDOT	Cost		Proje
J Computed RW Computed RW	CATV Power Supply CATV Power Supply			100%	\$0 \$0	\$0 \$0	
Misc. CATV Costs	Misc. CATV Costs Charge	d to RW Project:		1	TOTAL CATV	Total to RW Proj	Total to Cons Proj
	Misc. CATV Costs Charged to	o Const. Project:			\$64,932	\$64,932	
D. WATER Water Line Computed RW or or User Const	Diameter of	No Entry	Total Length(ft)	Percent VDOT	\$64,932 Total	to RW	to Cor
Water Line Computed RW or or User Const A Computed Const B Computed Const			Total Length(ft) 5,200	100% 100%	Total	to RW	to Coi Proj \$1,347,4
Water Line Computed RW or or User Const A Computed Const B Computed Const C Computed Const	Diameter of Water Pipe (in)	No Entry	Length(ft)	VDOT 100%	Total Cost \$1,347,463	to RW Project \$0	to Coi Proje \$1,347,4
Water Line Computed RW or or User Const A Computed Const B Computed Const C Computed Const	Diameter of Water Pipe (in)	No Entry	Length(ft)	100% 100% 100%	Total Cost \$1,347,463 \$0 \$0	to RW Project \$0 \$0 \$0	to Coi Proj \$1,347,4
Water Line Computed RW or or User Const A Computed Const C Computed Const C Computed Const C Computed Const D Computed Const Misc. Water Costs	Diameter of Water Pipe (in)	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$1,347,463 \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Coi Proji \$1,347,4 \$1,347,4
Water Line Computed RW or or User Const A Computed Const C Computed Const	Diameter of Water Pipe (in) 20	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$1,347,463 \$0 \$0 \$0 \$1,347,463	to RW Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj	to Col Proj \$1,347,4 \$1,347,4 Total to Cons Proj
Water Line Computed RW or or User Const A Computed Const Computed Const Computed Const Computed Const Computed Const Misc. Water Costs E	Diameter of Water Pipe (in) 20 Misc. Water Costs Charged to	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$1,347,463 \$0 \$0 \$1,347,463	to RW Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0	to Con Proje \$1,347,4 \$1,347,4

Total to Const Proj

\$275,694

Total to RW Proj

TOTAL SEWER

\$275,694

Misc. Sewer Costs

Misc. Sewer Costs Charged to Const. Project:

Misc. Sewer Costs Charged to RW Project:

F. NA	TURAL GA	S / PROPANE							
Distributio Computed	n RW or	Diameter of	No Entry	Total		Percent	Total	to RW	to Const
A Computed	Const RW	Gas Line (in)	Required	Length(ft) 1,525	1	100%	Cost \$82,713	\$82,713	Project \$0
C Computed C Computed D Computed	RW RW RW					100% 100% 100%	\$0 \$0 \$0	\$0	\$0 \$0 \$0
Transmiss						10070	\$82,713		\$0
Computed or User	RW or Const	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost		to Const Project
E Computed F Computed	RW RW					100%	\$0	\$0	\$0 \$0
G Computed Computed	RW RW					100%	\$0 \$0	\$0	\$0 \$0
Micc Natu	ral Gas / Propa	no Costs					\$0	\$0	\$0
I I		c. Gas / Pro Costs Charged	to RW Project:	2		ľ	PROPANE	Total to RW Proj	Total to Const Proj
J		Gas / Pro Costs Charged to					\$82,713	\$82,713	\$0
G. PE	TROLEUM	1							
Transmiss	ion								
Computed or User	RW or Const	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost	Project	to Const Project
B Computed C Computed	RW RW					100% 100% 100%	\$0 \$0 \$0	\$0	\$0 \$0 \$0
D Computed	RW					100%	\$0	\$0	\$0 \$0
Misc. Petro	oleum Costs								Total to Const
E	Misc	. Petroleum Costs Charged	to RW Project:			î l	TOTAL PETROLEUM	Total to RW Proj	Proj
F	Misc. Pe	etroleum Costs Charged to	Const. Project:				\$0	\$0	\$0
H. CE	LLULAR								
Cellular Te	lephone Costs	;							
Α	To	otal Cellular Costs Charged	to RW Project:			١	TOTAL CELLULAR	Total to RW Proj	Total to Const Proj
В	Total	Cellular Costs Charged to	Const. Project:				\$0	\$0	\$0
I. ADD	OITIONAL (COSTS							
		Add	ditional Utili	ty Costs to	Right-of-Way Project	:			
Comments:		Δdc	litional Utilit	ty Costs to	Construction Project				
Comments:		Add	and on the	ty costs to	O TO	•			
		Add	itional Utility	y Costs to	Utility Owners/Others	j.			
Comments:									
			TOTAL UTIL	LITY COST - E	RIGHT-OF-WAY PROJECT			Ş	2,162,468
			TOTAL UTILI	TY COST - CO	ONSTRUCTION PROJECT			Ş	31,623,157
			TOTAL UTILI	TY COST - <u>U</u>	TILITY OWNER / OTHERS				\$0
			GRA	ND TOTA	L UTILITY COSTS			\$	3,785,625
									Version 3.10



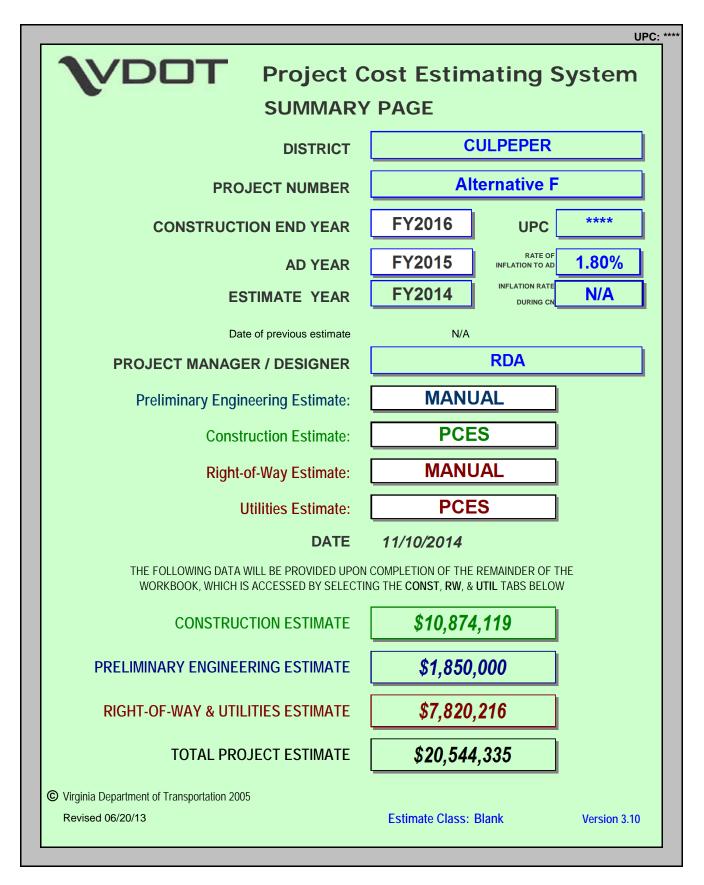
Project Cost Estimating System MANUAL ESTIMATE



	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

	DITURES		\$0	\$0	\$0	
RUMS				\$0	Φ.	
TRNS*P AWARD					\$0 \$0	
PROJEC					\$0 \$0	
		l	ESTIMATE YEAR		AD YEAR]
			FY2014	1.80%	FY2015]
			\$6,750,000	PE	\$6,750,000]
			\$9,386,604	RW	\$9,386,604	<u>.</u>
			\$0	CN	\$0	j
			\$16,136,604	TOTAL	\$16,136,604	ĺ
						•
Job#	Phase	Comment			Estimate	
	PE				\$6,750,000	1
	[FL				\$0,730,000]
		PE Cost Estim	ate [13% (rounded) o	f CN]		
	RW				\$785,280]
	<u> </u>					
		Relocations/To	otal Lakes		J	
	RW				\$6,438,856]
		R/W Total Co.	oto			
		N/W Total Co.	515		J	
	RW				\$2,162,468]
		Litilities to be in	ncluded in the right of	way estimate		
			ioladed in the right of	way commute		
]
					1	7
]
					1	1
]

Relocations input from ROW Dept	(3 takes)			\$785,280	
SF of Commercial SF of Residential	SF 0 755,291	Cost/SF \$0.00 \$3.10	Multiplier 2.75 2.75 TOTAL	Cost \$0 \$6,438,856 \$6,438,856	
PE Cost Calc	CI \$51,90	•	PE % 13%	PE \$6,750,000	



				UPC: ***
AVDUI	Stimating System ON / BRIDGE / PE			V DOT
Project No.	** MISSING DATA	\ **		
Interstate Project ?	No No			
Maintenance Project ?	No	*		
Route Number		*		
Geometric Standard	GS-5	*	Urban Principal Arteri	al System
Ad Date	2015		executably states and present	OSMICI.
Design Year ADT	37,000	*	Project Terrain	Rolling
Box Must Be Empty			Approx. DHV =	5,550
Enter Design Speed (MPH) (30, 40, 45, 50 or 60)	45	*	Design Speed =	45 MPH
Box Must Be Empty	No			
Box Must Be Empty	No			
Project Length (mi.)	0.85	*	Number of Additional Lanes:	Length of Add'l. Lanes (mi.):
Total Length -Adding or Building <u>Two Lanes</u> (mi.)	0.85	*	None	
Total Length - Adding or Building Four Lanes (mi.)		*	None	
Total Length - Building Ramps and Loops (mi.)		*	None	
Shoulder or Curb & Gutter? (Select S or C&G)	C&G	*	Enter Lane Width (ft)	>
Median Type - Graded, Raised, or None?	R	*	Normal Lane Width(ft)	12
Number of Crossovers (Divided Highways ONLY)	3	*		
Length - Curb & Gutter - Left PLUS Right Side (ft.)	4,700		Bike/Ped Construction C	osts (Statewide Avg.)
Length - Sidewalk - Left PLUS Right Side (ft.)	4,000	*	Length (ft)	300
Bike / Pedestrian Type	10' shared use			
			CE Cost	\$5,843
Total Length - Raised Median (ft.)	3,100		PE Cost	\$6,000
Number of <u>Right Turn Lanes</u> - Left PLUS Right Side		*	Inflated Const.Cost	\$50,842
Number of Left Turn Lanes - (Undivided Only)	ш	*	90'	CULPEPER Cost Factor used
			Construction Costs	
Signals, ITS, Signs and Lighting Costs*	\$753,156		Base #1 (PCES)	\$9,432,093
Cost of Large Drainage Structures	\$0		Base #2	\$0
In-Plan Utility Costs*	\$1,014,211		Enter Const CE Cost	\$0
Adjustment for Unusual Construction Costs	\$4,022,500		CE (13.25%)	\$1,249,752
* Totals include district factor calculations			Estimate (2014)	\$10,681,845
Additional (or University D. E. Conta				
Additional (or Unusual) P. E. Costs Select % of PE to be performed by Consultants	100%		PE Cost	\$1,526,171
Coloct // Of the to be performed by Consultants	10076		1 2 0031	\$1,520,171
Network Net 1 1 D. D. D. C. C. C.	5		E /Danton O /	47.00/

Note: <u>Do Not Include Bridge P. E. Costs Here</u>

Roadway P. E. / Roadway Const. = 17.0%

Version 3.10

VDOT	Project Cost Estimating System Miscellaneous Cost Estimates	VDOT
	COST OF LARGE DRAINAGE STRUCTURES	
Job# Descr	ption	Cost ()
		\$0
	ADJUSTMENT FOR UNUSUAL CONSTRUCTION COST	'S
Туре	Description	Cost ()
Other	Stormwater Management (SWM Facilities)	\$500,000
Maintenance of Traffic	MOT Costs	\$2,000,000
Other	Pedestrian Bridge (6090 SF @ \$250 /SF)	\$1,522,500
		-
		-
		┥ ├──
	_	┥┝━━
		┥┝━━
		=
		7
		7

		SIGN	ALS,	ITS,	SIGNS	San	d LIG	HTI	NG C	OST	ΓWORKSHI	EET		
Stand Alone Traffic Proje	ct·	No]											UPC: ****
			<u> </u>											or o.
SIGNALS Permanent Signals	New/ Mod.	Intersection Type	Direction		ajor Direction	Lance	Direction	Cro		Lange	Poles	Detection	Pre-emption	Cost
Location/Description		туре	Direction	Lanes	Direction	Lanes	Direction	Lanes	Direction	Lanes	Poles	Detection	Pre-emption	Cost
1 High Street	New	Four-way	West	5	East	5	South	2	North	3	Comb. M.A. Lighting	Video	Yes	\$240,942
2 Stony Point Road	New	Four-way	West	4	East	6	South	3	North	3	Comb. M.A. Lighting	Video	Yes	\$244,942
3														\$0
5														\$0 \$0
6														\$0
7														\$0
8														\$0 \$0 \$0 \$0 \$0
10														\$0
													Quantity	Cost
									Tempora	ry Sigr	nals - New Equipment	!		\$0
Temporary Signals - Modified Equipment												\$0		
	Locatio	n/Description	1										1	Cost
MISCELLANEOUS 1														
SIGNAL WORK 2	<u></u>													
											Signa	de Construe	tion Subtotal	\$485,883
ITS	Locatio	n/Descriptior	1								Signa	iis Colisti uc	tion Subtotal	Cost
ITS WORK 1		, 2000. iptioi	•											5 50.
2														
												TS Construc	tion Subtotal	\$0
MAJOR SIGN STRUCTUR	ES						Lighted					13 Construc	tion Subtotal	Extended
Type of Sign		Comment		<u>_</u> ,	Quantity		Y/N	-			Cost/Sigr	1	_	Cost
1						Ea.								
3				1		Ea. Ea.								
4				1		Ea.								
5				1		Ea. Ea.								
7				†		Ea.								
	Locatio	n/Descriptior	1	1										Cost
MISCELLANEOUS 1														
SIGN WORK 2														
											Sigı	ns Construc	tion Subtotal	\$0
LIGHTING												Nermalaan		
Continuous Roadwa		ype of Lighti	na	Comme	ents				N	o. Lan	es	Number of Miles		Cost
1	Convent	ional	9							8		0.32		\$350,957
	-	T		0							-	Number		01
1	Freeway	y Type of Lig	nting	Comme	ents				N	o. Lan	es]	of Miles]	Cost \$0
									ļ			Number of	<u>l</u>	
Interchange	Intercha	ange Type		7	Тур	e of Lig	hting		l		I	Interchange Interchange	s l	Cost \$0
2				+										\$0 \$0
3]										\$0
Miscellaneous	Locatio	n/Descriptior	,											Cost
1	Locatio	II/Description	•											0031
2											Linki	0	tion Cultivated	*250.057
													tion Subtotal	\$350,957 \$836,840
									District fact	or will be	e applied when the total cos			·
PROJECT COMMEN	ITS								District fact	OI WIII DE	е арріїей мпен іне іоіаї соз	si is passeu io	ine const-1 work	sneet
Prepared by				Dat	te Prepared/N	Modified:								Version 3.10

NAME OF THE OWNER, THE	1100		
3//		П	_
V	\mathbf{L}	u	



UPC: ****

UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL Transmission Computed Type No Entry Number Rural Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project Project RW Rural 100% \$0 \$0 \$0 Computed В \$0 \$0 \$0 Computed Rural RW Rural 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 \$0 \$0 **Distribution - Aerial** Computed No Entry Number Rural Percent Total to RW to Const Project or User of Pole of Poles or Urban VDOT Cost Project RW Three Phase Rural 100% \$66,531 \$66,531 \$0 Computed Computed Dual Three Phase 15 Rural \$228,690 \$228,690 \$0 G Computed RW Rural 100% \$0 \$0 \$0 H Computed Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 \$295,221 \$295,221 \$0 Distribution - Underground - by Linear Foot RW or No Entry Total Percent Total to RW to Const or User of Service Length(ft) VDOT Cost Project Project \$1,013,082 \$1,013,082 \$0 Computed RW Dual Three Phase 4,000 100% Computed 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$1,013,082 \$1,013,082 Distribution - Underground - by Pole Equivalent No Entry to RW to Const Computed RW or **Equivalent Type** Equiv.# Percent Total or User of Pole of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 50 Computed RW 100% \$0 \$0 50 Q Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** No Entry RW or to RW to Const Computed Type Total Percent Total Project \$0 or User Const of Service Length(ft) VDOT Cost Project \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$0 \$0 \$0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Number Percent Total to Const of MH's of Manhole VDOT Project Cost Project or User U \$0 100% 100% \$0 Computed RW \$0 \$0 \$0 Computed \$0 W 100% \$0 \$0 50 Computed RW Misc. Electrical Costs **Total to Const** TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$1,308,303 \$1,308,303 \$0 Misc. Electrical Costs Charged to Const. Project: Z

D	B. TELEPHOI	VIE							
D	. TELEPHOT	VE							
	erial - Copper Wire Computed RW or	Type of Cable	No Entry	Number			Tatal	to RW	to Co
	or User Const	(Pair Cable)	Required	of Poles		Percent VDOT	Total Cost		Proj
A C	Computed RW	900		48		100%	\$242,977	\$242,977	
	Computed RW					100%	\$0		
	Computed RW Computed RW	-				100%	\$0 \$0	- 700	
-	Somposed Title		-	-		10070	\$242,977		
	erial - Fiber Optic	12-11-22-00	40.00			2000			
	Computed RW or or User Const	Type of Cable (Optical Fiber)	No Entry Required	Number of Poles		Percent VDOT	Total Cost		to Co
	Computed RW	144	raiquiou	42		100%	\$516,340		
	Computed RW					100%	\$0		
	Computed RW Computed RW					100%	\$0 \$0		
	Computed NW					10076	\$516,340		
	nderground - Copper W		N. S.	.			No de la constante de la const		_
	Computed RW or or User Const	Type of Cable (Pair Cable)	No Entry Required	Total Length(ft)		Percent VDOT	Total Cost		to C Pro
	Computed RW	(i aii Cable)	Nequileu	Lengui(II)		100%] \$0		PIC
	Computed RW					100%	\$0		
	Computed RW Computed RW					100% 100%	\$0 \$0		
	Computed NV					10076	J \$0		
	nderground - Fiber Opt								
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total		to C
	or User Const Computed RW	(Optical Fiber)	Required	Length(ft)	ı	100%	Cost \$0		Pr
	Computed RW					100%	\$0		
	Computed RW					100%	\$0		
, [Computed RW					100%	\$0 \$0		
	nderground - Copper W								
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total		to C
	or User Const Computed RW	(Pair Cable)	Required	Length(ft)	ı	100%	Cost \$0		Pr
	Computed RW					100%	\$0		
	Computed RW					100%	\$0		
	Computed RW					100%	\$0 \$0		
Un	nderground - Fiber Opt	ic - In Conduit							
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total		to C
	or User Const	(Optical Fiber)	Required	4,000	1	100%	Cost \$559,231	Project \$559,231	Pr
	Computed RW			1,000		100%	\$0		
	Computed RW					100%	\$0	100	
	Computed RW	_				100%	\$559,231		
Ma	anholes for UG Teleph	one Service							
	Computed RW or		No Entry	0		Percent	Total		to C
	or User Const Computed RW	Item Telephone Manhole	Required	Quantity	r e	100%	Cost \$0		Pro
_	Computed RW	Telephone Manhole				100%	\$0		
Mi	sc. Telephone Costs						E		December 1
							TOTAL TELEPHONE	Total to RW Proj	Total to Cor Proj
A	Misc	c. Telephone Costs Charge	d to RW Project:						Fioj
12.0							\$1,318,547	\$1,318,547	
В	Misc. T	elephone Costs Charged to	Const Project				91,310,341	\$1,010,041	

A Computed RW SS Coax SS Coax Project Project Remaind RW SS Coax Required RW SS Coax SS								
Comparison NN er Type No Entry Frequency No First No				Number				
Section Sect		Туре	No Entry		Percent	Total	to RW	to Cons
100% 50 50 50 50 50 50 50			Required					Projec
Comparison RW		.650 Coax	+	63				S
Underground CATV Underground CATV Computed Rife Total Total Percent Total to RW to Computed Rife		-				70.00		S
Underground CATV Total T						\$0	\$0	\$
Comparison RW or Const C	Underground CAT	1				\$41,742	\$41,742	
Computed NW 100% 50 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 100% 50 50 50 100% 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 50 100% 50 50 50 50 100% 50 50 50 50 50 50 50			No Entry	Total		Total	to RW	to Cor
Computed RW Computed RW RW Rem Required RW Rem		of Service	Required	Length(ft)				Proje
Computed RW 100% S0 S0 S0 S0 S0 S0 S0			+					
Power Units Computed RW CATV Power Supply CATV Power Supply CATV Power Supply Total Computed RW CATV Power Supply CATV Power Supply Total Computed RW CATV Power Supply Total Computed RW CATV Power Supply Total Computed RW CATV Power Supply Total Catvo Power Power Power Supply Total Catvo Power P	G Computed RW							
Power Units	H Computed RW				100%			
Nisc. CATV Costs Nisc. CATV Costs Charged to RW Project: S41.742 S41	Power Units					30	30	
Camputed RW CATV Power Supply Total to Cat Project S41,742 S41								to Co
Misc. CATV Costs Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to Const. Project: S41,742			Required	Quantity				
Misc. CATV Costs Charged to RW Project:								
Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to Const. Project: S41,742	Misc. CATV Costs						W. 1560	
Misc. CATV Costs Charged to Const. Project: S41,742 S41,742		40.00				TOTAL CATV	Total to RW Proj	Total to Cons Proj
D. WATER		Misc. CATV Costs Charg	ged to RW Project:			100000		53
Water Line Computed RW or or User Const Water Pipe (in) Rinquirod Length(ft) VDDT Cost Project			TO BE THE TANK OF THE		2	£41 742	CA1 742	
C Computed Const Comp		Misc. CATV Costs Charged	I to Const. Project:			\$41,14Z	\$41,142	
Misc. Water Costs Misc. Water Costs Charged to Const. Project: Misc. Water Costs Charged to RW Project: Total to RW Proj Total to Const. Project	Water Line Computed RW or or User Const A Computed Const	Diameter of Water Pipe (in)	No Entry	Length(ft)	VDOT 100%	Total Cost \$1,036,510	to RW Project \$0	to Cor Proje \$1,036,5
Misc. Water Costs Charged to Const. Project: Stign	Water Line Computed RW or or User Const A Computed Const Computed Const Computed Const Computed Const	Diameter of Water Pipe (in)	No Entry	Length(ft)	100% 100% 100%	Total Cost \$1,036,510 \$0	to RW Project SO \$0 \$0	to Co Proj \$1,036.5
E. SANITARY SEWER Sewer Line Computed RW or or User Const Sewer Pipe (in) Required Length(it) A Computed Const Sewer Pipe (in) Required Length(it) Computed Const Const Computed Const Const Computed Const	Water Line Computed RW or or User Const A Computed Const B Computed Const C Computed Const	Diameter of Water Pipe (in)	No Entry	Length(ft)	100% 100% 100%	Total Cost \$1,036,510 \$0 \$0	to RW Project \$0 \$0 \$0 \$0	to Coi Proj \$1,036,5
E. SANITARY SEWER Sewer Line Computed RW or Object Sewer Pipe (in) Required Length(ft) Percent Total to RW to Control Contro	Water Line Computed RW or or User Const Computed Const Misc. Water Costs	Diameter of Water Pipe (in) 20	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$1,036,510 \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0 \$0	to Coi Proj \$1,036,5 \$1,036,5
Sewer Line Computed RW or Diameter of No Entry Total Percent Total to RW to Co or User Const Sewer Pipe (in) Required Length(ft) VDOT Cost Project P	Water Line Computed RW or or User Const A Computed Const Computed Const Computed Const Computed Const Computed Const Computed Const Misc. Water Costs	Diameter of Water Pipe (in) 20	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$1,036,510 \$0 \$0 \$0	to RW Project \$0 \$0 \$0 \$0 \$0	to Co Proj \$1,036,5 \$1,036,5
B Computed Const 100% \$0 \$0 C Computed Const 100% \$0 \$0	Water Line Computed RW or or User Const A Computed Const C Computed Const C Computed Const C Computed Const C Computed Const	Diameter of Water Pipe (in) 20 Misc. Water Costs Charged	No Entry Required	Length(ft)	100% 100% 100%	Total Cost \$1,036,510 \$0 \$0 \$1,036,510	to RW Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj	to Coi Proj \$1,036,5 \$1,036,5
	Water Line Computed RW or or User Const A Computed Const B Computed Const C Computed Const C Computed Const Misc. Water Costs E F E. SANITA Sewer Line Computed RW or or User Const	Diameter of Water Pipe (in) 20 Misc. Water Costs Charged Misc. Water Costs Charged Misc. Water Costs Charged Diameter of Sewer Pipe (in)	No Entry Required If to Const. Project: ged to RW Project:	Length(ft) 4,000 Total Length(ft)	VDOT 100% 100% 100% 100%	Total Cost \$1,036,510 \$0 \$0 \$0 \$1,036,510 TOTAL WATER \$1,036,510	to RW Project \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0	to Con Proj \$1,036.5 \$1,036,5
	Water Line Computed RW or or User Const Computed RW or or User Computed RW or or User Computed Const Computed Const Computed Const Computed Const Computed Const Computed Const	Diameter of Water Pipe (in) 20 Misc. Water Costs Charged Misc. Water Costs Charged Misc. Water Costs Charged Diameter of Sewer Pipe (in)	No Entry Required If to Const. Project: ged to RW Project:	Length(ft) 4,000 Total Length(ft)	VDOT 100% 100% 100% 100% 100% 100% 100%	Total Cost \$1,036,510 \$0 \$0 \$1,036,510 TOTAL WATER \$1,036,510 Total Cost \$90,392 \$0	to RW Project \$0 \$0 \$0 \$0 \$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0	to Co Proj \$1,036,5 \$1,036,5 Total to Cons Proj \$1,036,5

Misc. Sewer Costs

Misc. Sewer Costs Charged to Const. Project:

Misc. Sewer Costs Charged to RW Project:

\$90,392

\$90,392

TOTAL SEWER

Total to RW Proj

\$0

Total to Const Proj

\$90,392

F. NA	TURAL GA	AS / PROPANE							
Distributio Computed or User A Computed C Computed C Computed D Computed	RW or Const RW RW RW RW	Diameter of Gas Line (in) 4	No Entry Required	Total Length(ft) 2,000		Percent VDOT 100% 100% 100%	Total Cost \$108,477 \$0 \$0 \$0	Project \$108,477 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0 \$0 \$0
Transmiss Computed or User E Computed F Computed G Computed H Computed	RW or Const RW RW RW RW RW	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	to RW Project \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0 \$0
Misc. Natu I J		ane Costs cc. Gas / Pro Costs Charged Gas / Pro Costs Charged to	_ 0				TOTAL GAS / PROPANE \$108,477	Total to RW Proj \$108,477	Total to Const Proj \$0
G. PE Transmiss Computed or User A Computed C Computed C Computed C Computed C Computed	ITROLEUM Sion RW or Const RW RW RW RW	Diameter of Gas Line (in)	No Entry Required	Total Length(ft)		Percent VDOT 100% 100% 100% 100%	Total Cost \$0 \$0 \$0 \$0	Project \$0 \$0 \$0 \$0	to Const Project \$0 \$0 \$0 \$0
Misc. Petr E F		c. Petroleum Costs Charged tetroleum Costs Charged to					TOTAL PETROLEUM	Total to RW Proj	Total to Const Proj \$0
		s otal Cellular Costs Charged I Cellular Costs Charged to	-				TOTAL CELLULAR	Total to RW Proj	Total to Const Proj \$0
I. ADL	DITIONAL		ditional Utili	ty Costs to	Right-of-Way Project	:			
G		Add	ditional Utili	ty Costs to	Construction Project				
Comments:		Add	itional Utilit	y Costs to	Utility Owners/Others				뻭
					RIGHT-OF-WAY PROJECT				22,777,069
					TILITY OWNER / OTHERS			***************************************	\$1,126,901
			GRA	ND TOTA	L UTILITY COSTS			\$	3,903,971



Project Cost Estimating System MANUAL ESTIMATE



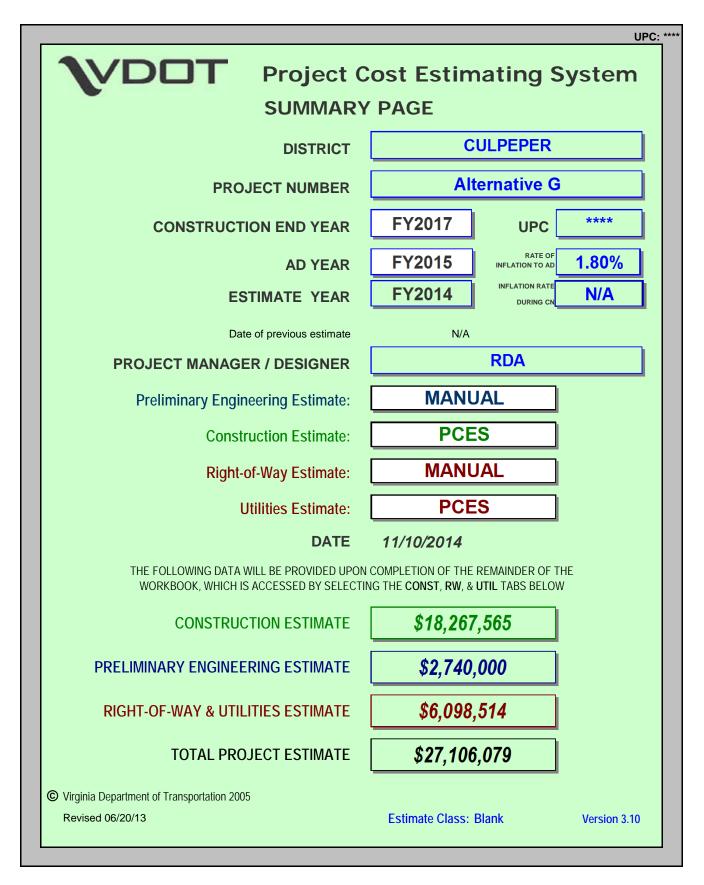
	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

	DITURES		\$0	\$0	\$0	
RUMS				\$0		
TRNS*P					\$0 \$0	
AWARD PROJEC					\$0 \$0	
I NOUL	711014				Ψ0	
			ESTIMATE YEAR		AD YEAR	
			FY2014	1.80%	FY2015	
			\$1,850,000	PE	\$1,850,000	
			\$7,820,216	RW	\$7,820,216	
			\$0	CN	\$0	
			\$9,670,216	TOTAL	\$9,670,216	
Job#	Phase	Comment			Estimate	
		Commons			Lottinato	
	PE				\$1,850,000	
		PE Cost Estim	ate [17% (rounded) of	CN1		
			,	,	· · · · · · · · · · · · · · · · · · ·	
	RW				\$826,040	
		Relocations/To	otal Takes			
	D14/				\$4.047.407	
	RW				\$4,217,107	
		R/W Total Co	sts			
	RW				\$2,777,069	
	IXVV				ΨΖ,ΓΓΓ,ΟΟΟ	
		Utilities to be in	ncluded in the right of v	way estimate		
	_					

Relocations input from ROW Dept 2 takes

\$826,040

SF of Commercial SF of Residential	SF 74,550 0	Cost/SF \$20.57 \$0.00	2.75	Cost \$4,217,107 \$0 \$4,217,107
PE Cost Calc	CI \$10,87	•	PE % 17%	PE \$1,850,000



				UPC: **
	Estimating System FION / BRIDGE / PE			VDOT
Project No.			1	
Interstate Project ?	No			
Maintenance Project ?	No	*		
Route Number		*		
Geometric Standard	GS-7	*	Urban Collector Stree	t System
Ad Date	2015			
Design Year ADT		*	Project Terrain	Rolling
OR Current (Recent) ADT				
Enter Design Speed (MPH) (30, 40, 45 or 50)	45	*	Minimum Design Speed =	
RRR Guidelines ? (Enter Yes or No)		*		
Surface Treat Only ?				
Project Length (mi.)	0.45	*	Number of Additional Lanes:	Length of Add'l.
Total Length -Adding or Building Two Lanes (mi.)	0.29		None	Lanes (mi.):
Total Length - Adding or Building Four Lanes (mi.)	0.16		None	
Total Length - Building Ramps and Loops (mi.)		*	None	
Shoulder or Curb & Gutter ? (Select S or C&G)	C&G	*	Enter Lane Width (ft))>
Median Type - Graded, Raised, or None ?	R	•	Normal Lane Width(ft)	12
Number of Crossovers (Divided Highways ONLY)	1	*		
Length - Curb & Gutter - Left PLUS Right Side (ft.)	4,975		Bike/Ped Construction C	Costs (Statewide Avg.)
Length - Sidewalk - Left PLUS Right Side (ft.)	2,215	*	Length (ft)	1,210
Bike / Pedestrian Type	10' shared use			
			CE Cost	\$22,234
Total Length - Raised Median (ft.)	717		PE Cost	\$21,000
Number of <u>Right Turn Lanes</u> - Left PLUS Right Side	2	*	Inflated Const.Cost	\$203,704
Number of Left Turn Lanes - (Undivided Only)	0	*	00	CULPEPER
			90 Construction Costs	% Cost Factor used
Signals, ITS, Signs and Lighting Costs*	\$184,447		Base #1 (PCES)	\$15,950,723
Cost of Large Drainage Structures	\$0	i	Base #2	\$0
In-Plan Utility Costs*	\$208,589	ĺ	Enter Const CE Cos	t > \$0
Adjustment for Unusual Construction Costs	\$13,175,100		CE (12.5%)	\$1,993,840
* Totals include district factor calculations			Estimate (2014)	\$17,944,563
Additional (or Unusual) P. E. Costs				
Select % of PE to be performed by Consultants		i	PE Cost	\$2,192,108

Note: <u>Do Not Include Bridge P. E. Costs Here</u>

Roadway P. E. / Roadway Const. = 15.0%

© Virginia Department of Transportation 2005 Revised 06/20/13 Today's Date: 11/10/14

Version 3.10

VDOT	Project Cost Estimating System Miscellaneous Cost Estimates	VDOT
	COST OF LARGE DRAINAGE STRUCTURES	
Job# Descript	tion	Cost ()
	ADJUSTMENT FOR UNUSUAL CONSTRUCTION C	OSTS \$0
Туре	Description	Cost ()
Other	Stormwater Management (SWM Facilities)	\$500,000
Maintenance of Traffic	MOT Costs	\$500,000
Other	Bridge (31,308 SF @ \$325 /SF)	\$10,175,100
Other	2 - Roundabouts	\$2,000,000
		-
	<u> </u>	
	1	
	1	
	1	
	1	

		SIGN	ALS, I	TS, S	SIGNS	and	LIGH	HTIN	IG CC)ST	WORKSH	EET		
Stand Alone Traffic Projec	t:	No]											UPC: ****
SIGNALS	New/	Intersection		М	ajor			Cre	oss		1			
Permanent Signals	Mod.	Type	Direction		Direction	Lanes	Direction			Lanes	Poles	Detection	Pre-emption	Cost
Location/Description		71												
1 E. High St./Willow Dr.	New	Four-way	North	2	South	1	East	1	West	2	Comb. M.A. Lightir	ng Video	Yes	\$204,942
2														\$0
3	-					ļ	<u> </u>							\$0 \$0
5							1							\$0
6														\$0
7														\$0
8 9	1						1							\$0 \$0
10														\$0
													Quantity	Cost
									Tempora	ry Sigr	nals - New Equipm	ent		\$0
									Tempora	ry Sigr	nals - Modified Equ	ipment		\$0
	Locatio	on/Description	า											Cost
MISCELLANEOUS 1														
SIGNAL WORK 2														
											Sigi	nals Construc	tion Subtotal	\$204,942
<u>ITS</u>	Locatio	on/Description	1											Cost
ITS WORK 1														
:	2													
												ITS Construc	tion Subtotal	\$0
MAJOR SIGN STRUCTURE	S						Lighted					113 Construc	cion Subiolai	Extended
Type of Sign		Comment			Quantity	Unit	Y/N				Cost/S	ign		Cost
1						Ea.								
2	-					Ea.								
3						Ea. Ea.								
5						Ea.								
6						Ea.								
7	Locatio	on/Description				Ea.								Cost
MISCELLANEOUS 1	Locatio	ni/Description											1	Cost
SIGN WORK 2														
LIGUTING											Si	gns Construc	tion Subtotal	\$0
LIGHTING Continuous Roadway	v											Number		
Commudus Roudwa		Type of Light	ing	Comme	nts				N	lo. Lan	es	of Miles		Cost
	1]			\$0
												Number		0
	reewa	y Type of Lig	nting	Comme	nts				1	lo. Lan	es 1	of Miles	1	Cost \$0
				<u> </u>					1		J	Number of		- 40
Interchange	Interch	ange Type		. .	Тур	e of Lig	hting		=			Interchange	s	Cost
	1													\$0
	3												_	\$0 \$0
				1 1					1				_	40
Miscellaneous	Locatio	n/Description	1										_	Cost
	2										Ligh	ting Constru	ction Subtotal	\$0
											3		CTION TOTAL	
									District fac	tor will b	ne applied when the to			
PROJECT COMMENT	rs											·		
Prepared by	у]	Dat	e Prepared/M	Modified:	:]					Version 3.10

_	-		
1	$^{\prime}$		_
		$\mathbf{-}$	



UPC: ****

UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL Transmission Computed Type No Entry Number Rural Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project Project RW Rural 100% \$0 \$0 \$0 Computed В \$0 \$0 \$0 Computed Rural RW Rural 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 \$0 \$0 **Distribution - Aerial** Computed No Entry Number Rural Percent Total to RW to Const or User of Pole of Poles or Urban VDOT Cost Project Project RW Three Phase Rural 100% \$66,531 \$66,531 \$0 Computed 6 Computed **Dual Three Phase** Rural 100% \$15,246 \$15,246 50 G Computed RW Rural 100% \$0 \$0 \$0 Н Computed RW Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 100% \$81,777 \$81,777 \$0 Distribution - Underground - by Linear Foot Computed RW or Type No Entry Total Percent Total to RW to Const or User Const of Service Length(ft) VDOT Cost Project Project \$0 Computed RW 100% \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 100% \$0 \$0 \$0 Distribution - Underground - by Pole Equivalent RW or **Equivalent Type** No Entry to RW to Const Computed Equiv. # Percent Total or User Const of Pole of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Q Computed RW 100% \$0 \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** No Entry RW or to RW to Const Computed Type Total Percent Total Project \$0 or User Const of Service Length(ft) VDOT Cost Project \$0 \$0 Computed RW 100% \$0 \$0 \$0 \$0 \$0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Number Percent Total to Const of MH's of Manhole VDOT Project Cost Project or User U \$0 100% 100% \$0 Computed RW \$0 \$0 \$0 Computed \$0 W 100% \$0 \$0 50 Computed RW Misc. Electrical Costs Total to Const TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$81,777 \$81,777 \$0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPHO	ONE							
	Aerial - Copper Wire								
	Computed RW or	Type of Cable	No Entry	Number		Percent	Total	to RW	to Const
Α	or User Const Computed RW	(Pair Cable) 300	Required	of Poles	հ	100%	Cost \$30,369	Project \$30,369	Project \$0
В	Computed RW Computed RW	300		<u>'</u>		100%	\$0,309	\$30,309	\$0 \$0
C	Computed RW					100%	so so	\$0	\$0
D	Computed RW					100%	\$0	\$0	\$0
					<u> </u>	_	\$30,369	\$30,369	\$0
	Aerial - Fiber Optic								
	Computed RW or	Type of Cable	No Entry	Number		Percent	Total	to RW	to Const
	or User Const	(Optical Fiber)	Required	of Poles		VDOT	Cost	Project	Project
E	Computed RW)	100%	\$0	\$0	\$0
F	Computed RW					100%	\$0	\$0	\$0
G	Computed RW					100%	\$0	\$0	\$0
Н	Computed RW					100%	\$0	\$0	\$0
							\$0	\$0	\$0
	Underground - Coppe					_			
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
- 1	or User Const Computed RW	(Pair Cable)	Required	Length(ft)	l	100%	Cost \$0	Project \$0	Project \$0
J	Computed RW		+	 		100%	\$0	\$0	\$0 \$0
K	Computed RW					100%	\$0	\$0	\$0
Ĺ	Computed RW					100%	\$0	\$0	\$0
							\$0	\$0	\$0
	Underground - Fiber C	Optic							
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
	or User Const	(Optical Fiber)	Required	Length(ft)		VDOT	Cost	Project	Project
M	Computed RW		· ·			100%	\$0	\$0	\$0
N	Computed RW					100%	\$0	\$0	\$0
0	Computed RW					100%	\$0	\$0	\$0
Р	Computed RW			<u> </u>		100%	\$0	\$0	<u>\$0</u>
							\$0	\$0	\$0
	Underground - Coppe					_			
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
Q	or User Const Computed RW	(Pair Cable)	Required	Length(ft))	100%	Cost \$0	Project \$0	Project \$0
R	Computed RW					100%	\$0	\$0	\$0 \$0
S	Computed RW					100%	\$0	\$0	\$0
T	Computed RW					100%	\$0	\$0	\$0
						_	\$0	\$0	\$0
	Underground - Fiber C	Optic - In Conduit							
	Computed RW or	Type of Cable	No Entry	Total		Percent	Total	to RW	to Const
100	or User Const	(Optical Fiber)	Required	Length(ft)		VDOT	Cost	Project	Project
U	Computed RW	Automorphic Action and the second]	100%	\$0	\$0	\$0
V	Computed RW					100%	\$0	\$0	\$0
W	Computed RW					100%	\$0	\$0	\$0
X	Computed RW					100%	\$0 \$0	\$0 \$0	\$0 \$0
	Hanhalan for U.S. T. I.	nhana Camina					\$0	\$0	\$0
	Manholes for UG Tele	phone service	No Page			D	+		
	Computed RW or or User Const	Item	No Entry Required	Quantity		Percent VDOT	Total Cost	to RW	to Const Project
Y	Computed RW	Telephone Manhole	Raquired	Quantity	ì	100%) SO	Project \$0	\$0
z	Computed RW	Telephone Manhole				100%	\$0	\$0	\$0
								-	
	Misc. Telephone Cost	s							
							TOTAL TELEPHONE	Total to RW Proj	Total to Const
AA	133	Misc. Telephone Costs Charg	ed to RW Project:				to will be a second to the		Proj
and a	1.8		,				The state of the s	1/1000000000000000000000000000000000000	
ВВ	Mis	c. Telephone Costs Charged	to Const. Project				\$30,369	\$30,369	\$0
	mis		To a contract to just						

or User Const A Computed RW 650 Coax 14 100% B Computed RW 100% F Computed RW 100% Computed Const 100% Com	Cost \$9,276 \$0 \$0 \$0 \$9,276 Total Cost \$0 \$0	\$9,276 \$0 \$0 \$0 \$9,276 to RW Project	Proje
Underground CATV Computed RW or or Units Computed RW or Computed RW or Computed RW Computed RW or Computed RW Computed RW or Computed RW Computed Const Misc. CATV Costs Charged to Const. Project: D. WATER Water Line Computed Const Water Pipe (in) Required Length(it) VDOT A Computed Const Computed Const Domputed Const Computed Const Domputed Const Dom	\$9,276 Total Cost \$0 \$0 \$0 \$0	\$9,276 to RW Project	
Computed RW or of Service Required Length(th) Computed RW or or User Const Misc. CATV Costs Charged to Const. Project: Misc. CATV Costs Charged to RW Project: Mis	\$0 \$0 \$0 \$0	Project	
G Computed RW 100% Power Units Computed RW Or or User Const Required Computed RW CATV Power Supply 100% Computed RW CATV Costs Misc. CATV Costs Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to Const. Project: Misc. CATV Costs Charged to RW Project: Misc. CA	\$0		to Con Proje
Computed RW or or User Const Item Required Quantity Percent YDDT Computed RW Computed RW Computed RW CATV Power Supply 100% Misc. CATV Costs Misc. CATV Costs Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to Const. Project: D. WATER Water Line Computed RW or or User Const Water Pipe (in) Required Length(it) A Computed Const 16 800 100% Computed Const 100%	\$0	\$0	
Computed RW or or User Const Item Required Quantity Percent VDOT Computed RW CATV Power Supply 100% Misc. CATV Costs Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to Const. Project: Misc. CATV Costs Charged to Const. Project: Water Line Computed RW or or User Const Water Pipe (in) Required Length(it) A Computed Const 16 800 100% Computed Const	\$0		
Misc. CATV Costs Charged to RW Project: Misc. CATV Costs Charged to Const. Project: D. WATER Water Line Computed RW or or User Const Water Pipe (in) Required Length(ft) A Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) C Computed Const Diameter of No Entry Total Length(ft) D D D D D D D D D D D D D D D D D D D	Total Cost \$0 \$0	Project \$0	to Cor Proje
Misc. CATV Costs Charged to Const. Project: D. WATER Water Line Computed RW or or User Const Water Pipe (in) Required Length(it) VDOT	TOTAL CATV 1	Total to RW Proj	Total to Cons Proj
Water Line Computed RW or or User Const Water Pipe (in) Required Length(ft) A Computed Const 16 800 100% C Computed Const 100% D Computed Const 100%	\$9,276	\$9,276	
Computed or User Const Water Pipe (in) Required Length(ft) VDOT A Computed Const Const Computed Const Computed Const Computed Const Co			
D Computed Const 100%	Total Cost \$186,570 \$0 \$0	Project \$0 \$0	to Cor Proje \$186,5
Misc. Water Costs	\$186,570	\$0	\$186,5
E Misc. Water Costs Charged to Const. Project:	OTAL WATER 1	Total to RW Proj	Total to Cons Proj
F Misc. Water Costs Charged to RW Project:	\$186,570	\$0	\$186,5
E CANUTARY CEIMER			
E. SANITARY SEWER Sewer Line			

		E. SA	NITA	RY.	SEWER							
١		Sewer Line										
1		Computed	RW or		Diameter of	No Entry	Total		Percent	Total	to RW	to Const
-1		or User	Const		Sewer Pipe (in)	Required	Length(ft)		VDOT	Cost	Project	Project
- 1	A	Computed	Const	17 3	24		250	1	100%	\$45,196	\$0	\$45,196
- 1	В	Computed	Const						100%	\$0	\$0	\$0
- 1	C	Computed	Const		The state of the s			1	100%	\$0	\$0	\$0
- 1	D	Computed	Const						100%	\$0	\$0	SO_
- 1		ā.		-						\$45,196	\$0	\$45,196
- 1												
		Misc. Sewer	Costs							TOTAL SEWER	Total to RW Proj	Total to Const Proj
1	E			Misc	. Sewer Costs Charged to	Const. Project:						rioj
	F			N	lisc. Sewer Costs Charged	to RW Project:				\$45,196	\$0	\$45,196
- 1				-77								

F. NAT	TURAL GA	AS / PROPANE									
Distribution Computed or User A Computed	RW or Const	Diameter of Gas Line (in)	No Entry Required	Total Length(ft) 800	1	Percent VDOT 100%	Total Cost \$43,391	to RW Project \$43,391	to Const Project \$0		
B Computed C Computed D Computed	RW RW RW					100% 100% 100%	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0		
Transmissi Computed	on RW or	Diameter of	No Febru	Total		Percent	\$43,391 Total	\$43,391 to RW	\$0		
or User E Computed F Computed	Const RW RW	Gas Line (in)	No Entry Required	Length(ft)	i i	VDOT 100% 100%	Cost \$0 \$0	Project \$0 \$0	Project \$0 \$0		
G Computed H Computed	RW RW					100%	\$0 \$0		\$0 \$0 \$0		
Misc. Natur	ral Gas / Propa	ane Costs					TOTAL GAS/	Total to RW Proj	Total to Const		
J		sc. Gas / Pro Costs Charged Gas / Pro Costs Charged to					PROPANE \$43,391	\$43,391	Proj \$0		
G. PETROLEUM											
Transmissi Computed	RW or	Diameter of	No Entry	Total		Percent	Total	to RW	to Const		
A Computed B Computed C Computed	RW RW RW	Gas Line (in)	Required	Length(ft)		100% 100% 100%	\$0 \$0 \$0 \$0	Project \$0 \$0 \$0	Project \$0 \$0 \$0		
D Computed	RW					100%	\$0 \$0	\$0	\$0 \$0		
	leum Costs	Detection Costs Character	LL- DW Designate			ı .	TOTAL PETROLEUM	Total to RW Proj	Total to Const Proj		
F		c. Petroleum Costs Charged etroleum Costs Charged to	COLUMN TO THE STATE OF THE STAT				\$0	\$0	\$0		
	LLULAR										
Cellular le	lephone Costs	otal Cellular Costs Charged	I to RW Project:			l	TOTAL CELLULAR	Total to RW Proj	Total to Const Proj		
В		l Cellular Costs Charged to	-]	\$0	\$0	\$0		
I. ADD	ITIONAL (ditional I Itili	tu Coete to	Right-of-Way Project						
Comments:									\equiv		
Comments:		Add	ditional Utili	ty Costs to	Construction Project	:					
Comments:		Add	itional Utilit	y Costs to	Utility Owners/Others	i .					
			TOTAL UTIL	LITY COST - E	RIGHT-OF-WAY PROJECT				\$164,812		
					ONSTRUCTION PROJECT				\$231,766		
					TILITY OWNER / OTHERS L UTILITY COSTS				\$0 \$396,578		
									Version 3.10		

UPC: ****



Project Cost Estimating System MANUAL ESTIMATE



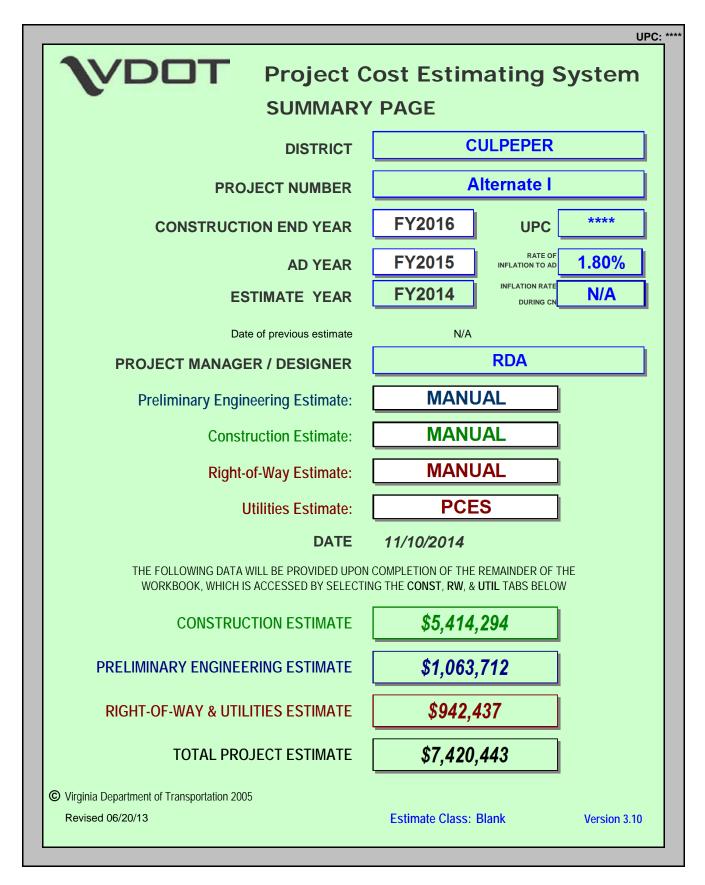
	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

	JIIUKES	\$0	φυ	Φ0
RUMS			\$0	
TRNS*P				\$0
AWARD				\$0
PROJEC	CTION			\$0
		ESTIMATE YEAR		AD YEAR
		FY2014	1.80%	FY2015
		\$2,740,000	PE	\$2,740,000
		\$6,098,514	RW	\$6,098,514
		\$0	CN	\$0
		\$8,838,514	TOTAL	\$8,838,514
Job#	Phase	Comment		Estimate
JUD #	Filase	Comment		LStilliate
	PE			\$2,740,000
		PE Cost Estimate [15% (rounded) of	CNI	
		i E Oost Estimate [10 % (Tourided) of	ON	
	RW			\$860,270
		Relocations/Total Takes		
	RW			\$5,073,431
		R/W Total Costs		
	D) 4/			
	RW			\$164,812
		Utilities to be included in the right of v	way estimate	
				1
				1

Relocations input from	ROW Dept	3 takes
------------------------	----------	---------

\$860,270

SF of Commercial	SF 128,653	\$14.34		Cost \$5,073,431
SF of Residential	0	\$0.00	2.75 TOTAL	\$0 \$5,073,431
PE Cost Calc	CI \$18,26	•	PE % 15%	PE \$2,740,000



Alternative I

Price	Item #	Description	Units	Est. Quantity	Unit Price	Extended Amount
VDOT	0100	MOBILIZATION	LS	•	\$180,758.84	\$180,758.84
VDOT	00101	CONST. SURVEYING	LS	1.00		\$29,853.24
VDOT	00110	CLEARING AND GRUBBING	ACRE	0.10		\$2,459.17
		Ea	rthwork			
VDOT	00120	REGULAR EXCAVATION	CY	1100.00	\$19.56	\$21,516.00
		R	oadway			
VDOT	16395	ASPH. CONC.BASE CR. TY. BM-25.0A	TON	623.56	\$78.93	\$49,217.24
VDOT	16242	AGGR. BASE MAT'L NO. 21-B	TON	643.63	\$27.72	\$17,841.48
VDOT	16373	INTERMEDIATE MIX IM-19.0A	TON	140.56	\$101.31	\$14,239.68
VDOT	16335	ASPHALT CONCRETE TY. SM-9.5A	TON	125.13	\$72.61	\$9,085.33
VDOT	68315	Milling 1.5" Depth	SY	238.89	\$55.00	\$13,138.89
VDOT	13220	HYDR. CEMENT CONC. SIDEWALK 4"	SY	400.00	\$36.94	\$14,776.00
VDOT	14120	REMOVAL OF COMB. CURB AND GUTTER	LF	1072.00	\$9.74	\$10,441.28
VDOT	14440	SAW CUT	LF	1072.00	\$3.00	\$3,216.00
VDOT	21020	MEDIAN STRIP MS-1	SY	135.00	\$147.35	\$19,892.25
VDOT	14416	STD. CURB CG-6	LF	1210.00	\$54.00	\$65,340.00
VDOT	13530	RETAINING WALL, RW-3	CY	2019.70	\$672.00	\$1,357,238.40
VDOT	27505	Silt Fence	LF	1930.00	\$2.83	\$5,461.90
		D	rainage			
VDOT	01246	24" STORM SEWER PIPE	LF	600.00	\$65.00	\$39,000.00
VDOT	06819	DROP INLET DI-3B, L=8'	EA	5.00	\$4,096.79	\$20,483.95
		STORMWATER FACILITIES	LS	1.00	\$250,000.00	\$250,000.00
			Traffic			
VDOT	54020	TY. A PAVEMENT LINE MARKING 4"	LF	5000.00	\$0.18	\$900.00
VDOT	54028	TY. A PAVEMENT LINE MARKING 24"	LF	410.00	\$3.63	\$1,488.30
VDOT	54300	PAVEMENT MARKING ARROWS	EA	20.00	\$285.00	\$5,700.00
PCES		TRAFFIC SIGNALIZATION	LS	1.00		\$607,354.07
		Mainten	ance of Traffic			
		MOT	EA	1.00	\$200,000.00	\$200,000.00
		l	Jti <u>l</u> ities			
PCES		UTILITIES (CONSTR.)	LS	1.00	\$0.00	\$256,533.71
		Ind	cidentals			
		Incidentals (20%)	LS	1.00	\$603,035.38	\$603,035.38
	<u>-</u>				SUBTOTAL:	\$3,798,971.11

Contingency (20%) \$759,794.22 CEI (20%) \$759,794.22 TOTAL \$5,318,559.56



Project Cost Estimating System



UPC: ****

UTILITIES ESTIMATE ** MISSING DATA ** Project No.: A. ELECTRICAL **Transmission** Computed RW or Type No Entry Number Rural Percent Total to RW to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project \$0 Computed RW Rural 100% \$0 \$0 В Computed RW Rural 100% \$0 \$0 \$0 С Computed RW Rural 100% \$0 \$0 \$0 Computed Rural 100% \$0 \$0 \$0 **Distribution - Aerial** No Entry to RW Computed RW or Туре Number Rural Percent Total to Const or User Const of Pole Required of Poles or Urban VDOT Cost Project Project Computed RW Three Phase 4 Rural 100% \$44,354 \$44,354 \$0 Computed RW Dual Three Phase Rural 100% \$30,492 \$30,492 \$0 G Computed RW Rural 100% \$0 \$0 \$0 Н Computed RW Rural 100% \$0 \$0 \$0 Computed RW Rural 100% \$0 \$0 \$0 Rural 100% \$74,846 \$74,846 \$0 **Distribution - Underground - by Linear Foot** Computed RW or Type No Entry Total Percent Total to RW to Const or User Const of Service Required Length(ft) VDOT Cost Project Project \$163,721 Computed RW Three Phase 800 100% \$163,721 \$0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Computed 100% \$0 \$163,721 \$163,721 \$0 Distribution - Underground - by Pole Equivalent RW or No Entry to RW Computed Equivalent Type Equiv. # Percent Total to Const or User Const of Pole Required of Poles VDOT Cost Project Project 0 Computed RW 100% \$0 \$0 \$0 Computed RW 100% \$0 \$0 \$0 Q Computed RW 100% \$0 \$0 \$0 100% \$0 \$0 \$0 **Distribution - Conduit for Underground Electrical** to RW RW or No Entry Computed Total Percent Total to Const Type or User Const of Service Required Length(ft) VDOT Cost Project Project \$8,675 \$8 675 Computed Computed RW RW for Three Phase UG 100% 100% \$0 800 \$8,675 \$8,675 **\$**0 **Distribution - Underground - Manholes** RW or Size / Price Range No Entry to RW Computed Number Percent Total to Const Project of Manhole Required of MH's VDOT or User Cost Project Const U \$0 \$0 \$0 Computed RW RW 100% 100% \$0 \$0 Computed \$0 W RW 100% \$0 \$0 \$0 Computed \$0 \$0 \$0 Computed \$0 \$0 Misc. Electrical Costs **Total to Const** TOTAL ELECTRICAL Total to RW Proj Proj Misc. Electrical Costs Charged to RW Project: \$247,242 \$247,242 **\$**0 Misc. Electrical Costs Charged to Const. Project: Z

	B. TELEPHO	ONE							
	Aerial - Copper Wire Computed RW or or User Const	Type of Cable (Pair Cable)	No Entry Required	Number of Poles		Percent VDOT	Total Cost	to RW Project	to Const Project
A B C D	Computed RW Computed RW Computed RW Computed RW	900		2		100% 100% 100% 100%	\$18,801 \$10,124 \$0 \$0	\$18,801 \$10,124 \$0 \$0	\$0 \$0 \$0 \$0
b	Aerial - Fiber Optic	<u> </u>				10070	\$28,925	\$28,925	\$0
E	Computed RW or or User Const Computed RW	Type of Cable (Optical Fiber) 144	No Entry Required	Number of Poles	1	Percent VDOT 100%	Total Cost \$147,526	to RW Project \$147,526	to Const Project \$0
F G H	Computed RW Computed RW Computed RW					100% 100% 100%	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0
	Underground - Coppe	er Wire					\$147,526	\$147,526	\$0
l J	Computed RW or	Type of Cable (Pair Cable)	No Entry Required	Total Length(ft)]	Percent VDOT 100% 100%	Total Cost \$0 \$0	to RW Project \$0 \$0	to Const Project \$0 \$0
K L	Computed RW Computed RW					100% 100%	\$0 \$0 \$0	\$0 \$0	\$0 \$0 \$0
	Underground - Fiber (\$0	
M	Computed RW or	Type of Cable (Optical Fiber)	No Entry Required	Total Length(ft)]	Percent VDOT 100%	Total Cost \$0	to RW Project \$0	to Const Project \$0
N O P	Computed RW Computed RW Computed RW					100% 100% 100%	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0
	Underground - Coppe						\$0	\$0	\$0
Q	Computed RW or const Computed RW	Type of Cable (Pair Cable)	No Entry Required	Total Length(ft)) 1	Percent VDOT 100%	Total Cost \$0	to RW Project \$0	to Const Project \$0
R S T	Computed RW Computed RW Computed RW Computed RW					100% 100% 100%	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0
	Underground - Fiber (Ontic - In Conduit	<u> </u>				\$0	\$0	\$0
U	Computed RW or or User Const	Type of Cable (Optical Fiber)	No Entry Required	Total Length(ft)	1	Percent VDOT 100%	Total Cost \$0	to RW Project \$0	to Const Project \$0
V W	Computed RW Computed RW					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
Х	Computed RW	unhama Camilia				100%	\$0 \$0	\$0 \$0	\$0 \$0
	Manholes for UG Tele Computed RW or or User Const	ltem	No Entry Required	Quantity		Percent VDOT	Total Cost	to RW Project	to Const Project
Y Z	Computed RW Computed RW	Telephone Manhole Telephone Manhole				100%	\$0 \$0	\$0 \$0	\$0 \$0
	Misc. Telephone Cost		amed to DM Daylor (TOTAL TELEPHONE	Total to RW Proj	Total to Const Proj
AA BB		Misc. Telephone Costs Charg sc. Telephone Costs Charg					\$176,450	\$176,450	\$0

C. CATV							
La LAMIV							
Aerial CATV	T	No Fator	Number	D4	T-4-1	4- DW	4- 0
Computed RW or or User Const	Type of Service	No Entry Required	of Pole Att'mnts	Percent VDOT	Total Cost	to RW Project	to Cor Proje
A Computed RW	.650 Coax		4	100%	\$2,650	\$2,650	
B Computed RW C Computed RW				100%	\$0	\$0	
C Computed RW Computed RW				100%	\$0 \$0	\$0 \$0	
					\$2,650	\$2,650	
Underground CATV							
Computed RW or or User Const	Type of Service	No Entry	Total	Percent VDOT	Total Cost	to RW	to Co
E Computed RW	of Service	Required	Length(ft)	100%	\$0	Project \$0	Proje
F Computed RW				100%	\$0	\$0	
G Computed RW Computed RW		 	-	100% 100%	\$0 \$0	\$0 \$0	
- Compared 1		<u> </u>		10070	\$0	\$0	
Power Units							
Computed RW or or User Const	14.5	No Entry Required	Ougatity	Percent VDOT	Total Cost	to RW Project	to Co
I Computed RW	CATV Power Supply	Required	Quantity	100%	Cost	\$0	Proj
J Computed RW	CATV Power Supply			100%	\$0	\$0	
Misc. CATV Costs				ı			
					TOTAL CATV	Total to RW Proj	Total to Cons Proj
	Misc. CATV Costs Charged	d to RW Project:					Fioj
	Misc. CATV Costs Charged to	Const Project:			\$2,650	\$2,650	
	Milac. CATV COSIS Charged to	o const. i Toject.		l			
Water Line Computed RW or or User Const	Diameter of Water Pipe (in)	No Entry Required	Total	Percent VDOT	Total Cost	to RW Project	to Cor Proje
A Computed Const	16	Required	Length(ft) 1,100	100%	\$256,534	\$0	\$256,5
B Computed Const C Computed Const				100%	\$0	\$0	
C Computed Const Computed Const		+		100%	\$0		
	-			I 100% I		\$0 \$0	
				100%	\$0 \$256,534	\$0 \$0 \$0	
Mine Water Coate				100%	\$0	\$0	
Misc. Water Costs					\$0	\$0 \$0	\$256,5
	Misc. Water Costs Charged to	o Const. Project:			\$0 \$256,534	\$0	\$256,5
E		_		100%	\$0 \$256,534	\$0 \$0	\$256,5 Total to Cons Proj
E	Misc. Water Costs Charged to	_		100%	\$256,534 TOTAL WATER	\$0 \$0	\$256,5 Total to Cons
E		_		100%	\$256,534 TOTAL WATER	\$0 \$0	\$256,5 Total to Cons
E	Misc. Water Costs Charged	_		100%	\$256,534 TOTAL WATER	\$0 \$0	\$256,5 Total to Cons
E. SANITA	Misc. Water Costs Charged	_		100%	\$256,534 TOTAL WATER	\$0 \$0	\$256,5 Total to Cons
E. SANITA	Misc. Water Costs Charged	d to RW Project:	Total		\$256,534 TOTAL WATER	\$0 \$0	\$256,5 Total to Conservation Proj \$256,5
E. SANITAL Sewer Line Computed RW or or User Const	Misc. Water Costs Charged	_	Total Length(ft)	Percent VDOT	\$0 \$256,534 TOTAL WATER \$256,534	\$0 \$0 Total to RW Proj \$0 to RW Project	\$256,5 Total to Cons Proj \$256,5
E. SANITA Sewer Line Computed RW or or User Const A Computed Const	Misc. Water Costs Charged RY SEWER Diameter of	d to RW Project:		Percent VDOT 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0	\$0 \$0 Total to RW Proj \$0 to RW Project \$0	\$256,5 Total to Cons Proj \$256,5
E. SANITAL Sewer Line Computed RW or or User Const Computed Const B Computed Const C Computed Const C Computed Const	Misc. Water Costs Charged RY SEWER Diameter of	d to RW Project:		Percent VDOT 100% 100% 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0 \$0 \$0	\$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0 \$0 \$0	\$256,5 Total to Cons Proj \$256,5
E. SANITAL Sewer Line Computed RW or or User Const Computed Const B Computed Const Computed Const Computed Const	Misc. Water Costs Charged RY SEWER Diameter of	d to RW Project:		Percent VDOT 100% 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0 \$0 \$0 \$0	to RW Project S0 S0 S0 S0 S0 S0	\$256,5 Total to Cons Proj \$256,5
E. SANITAL Sewer Line Computed RW or or User Const Computed Const B Computed Const C Computed Const C Computed Const	Misc. Water Costs Charged RY SEWER Diameter of	d to RW Project:		Percent VDOT 100% 100% 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0 \$0 \$0	\$0 \$0 Total to RW Proj \$0 to RW Project \$0 \$0 \$0 \$0	\$256,5 Total to Cons Proj \$256,5
E. SANITAL Sewer Line Computed RW or or User Const Computed Const B Computed Const C Computed Const C Computed Const	Misc. Water Costs Charged RY SEWER Diameter of	d to RW Project:		Percent VDOT 100% 100% 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0 \$0 \$0 \$0	to RW Project \$0 \$0 \$0	\$256,5 Total to Cons Proj \$256,5
E. SANITA Sewer Line Computed RW or or User Const Computed Const	Misc. Water Costs Charged RY SEWER Diameter of Sewer Pipe (in)	No Entry Required		Percent VDOT 100% 100% 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0 \$0 \$0 \$0	to RW Project S0 S0 S0 S0 S0 S0	\$256,5
E. SANITA Sewer Line Computed RW or or User Const Computed Const	Misc. Water Costs Charged RY SEWER Diameter of	No Entry Required		Percent VDOT 100% 100% 100%	\$0 \$256,534 TOTAL WATER \$256,534 Total Cost \$0 \$0 \$0 \$0	to RW Project \$0 \$0 \$0	\$256,5 Total to Cons Proj \$256,5

Misc. Sewer Costs Charged to RW Project:

				0 / 0000445							
	F. NAI	URAL	. GA	S / PROPANE							
	Distribution	l									
	Computed	RW or		Diameter of	No Entry	Total		Percent	Total	to RW	to Const
	or User	Const	٠.	Gas Line (in)	Required	Length(ft)		VDOT	Cost		Project
A	Computed	RW	4	2		800		100%	\$28,927	\$28,927	\$0
B C	Computed Computed	RW RW	-					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
D	Computed	RW	1					100%	\$0	\$0	\$0 \$0
	-								\$28,927	\$28,927	\$0
	Transmissio	on									
	Computed	RW or		Diameter of	No Entry	Total		Percent	Total	to RW	to Const
	or User	Const	,	Gas Line (in)	Required	Length(ft)		VDOT	Cost		Project
E	Computed	RW	4					100%	\$0	\$0	\$0
F G	Computed Computed	RW RW	-			-		100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
Н	Computed	RW	1					100%	\$0 \$0	\$0 \$0	\$0 \$0
	Computed	1311	_			<u> </u>		10070	\$0	\$0	\$0
									,-	, ,	
	Misc. Natura	al Gas /	Propa	ne Costs					TOTAL GAS /		Total to Const
				0 10 0 10					PROPANE	Total to RW Proj	Proj
- 1			MIS	c. Gas / Pro Costs Charged	to RW Project:						
J			Misc. G	Bas / Pro Costs Charged to	Const. Project:				\$28,927	\$28,927	\$0
	G. PET	POLE	=1 11/1	1							
	G. FET	KOLE									
	Transmissio	on									
	Computed	RW or		Diameter of	No Entry	Total		Percent	Total	to RW	to Const
	or User	Const	٠.	Gas Line (in)	Required	Length(ft)		VDOT	Cost	•	Project
A	Computed	RW	-					100%	\$0	\$0	\$0
B C	Computed Computed	RW RW	1					100% 100%	\$0 \$0	\$0 \$0	\$0 \$0
D	Computed	RW	1					100%	\$0	\$0	\$0
	Compated	1377	_					10070	\$0	\$0	\$0
									,	•••	
	Misc. Petrol	eum Co	sts								Total to Const
									TOTAL PETROLEUM	Total to RW Proj	Proj
Е			Misc.	. Petroleum Costs Charged	I to RW Project:						
F		- 1	Misc. Pe	etroleum Costs Charged to	Const. Project:				\$0	\$0	\$0
						'					
	H. CEL	LULA	P								
	II. CLL	LULA	I/A								
	Cellular Tele	ephone (Costs								
											Total to Const
Α			To	otal Cellular Costs Charged	I to RW Project:				TOTAL CELLULAR	Total to RW Proj	Proj
					_	<u> </u>			en	\$0	\$0
В			lotal	Cellular Costs Charged to	Const. Project:				Ψ	\$0	φυ
	I. ADDI	ITION	AL C	COSTS							
					dition of LUCC	h. 0	Digital of March David		Г		
				Add	uidonai Utili	ity Costs to	Right-of-Way Project :				
Com	ments:										
	-			اه ۸	ditional LIE	ity Coata ta	Construction Project				
	_			Add	aldonal Utili	ity Costs to	Construction Project :				
Com	ments:										
				۸۵۵	itional Hitili	v Costs to	Utility Owners/Others :				
	_			Auu	idonal Othic	y Costs to	ounty Owners/Others.				
Com	ments:										
					TOTAL LITH	LITY COST - F	RIGHT-OF-WAY PROJECT				\$455,270
					. 517.2 511	0001 ^ <u>1</u>	J. IIII I NOULUI				\$.co,210
					TOTAL UTIL	ITY COST - CO	DNSTRUCTION PROJECT				\$256,534
					TOTAL UTIL	ITY COST - <u>U</u>	TILITY OWNER / OTHERS				\$0
							TV 00.0T0 (7.0TC)				0744 000
				GI	KAND TOT	AL UTILI	TY COSTS (PCES)				\$711,803
											Version 3.10

UPC: ****



Project Cost Estimating System MANUAL ESTIMATE



	DATE	PE	RW	CN
EXPENDITURES		\$0	\$0	\$0
RUMS			\$0	
TRNS*PORT				\$0
AWARD				\$0
PROJECTION				\$0

			ESTIMATE YEAR		AD YEAR	
			FY2014	1.80%	FY2015	
			\$1,063,712	PE	\$1,063,712	
			\$942,437	RW	\$942,437	
			\$5,318,560	CN	\$5,414,294	
			\$7,324,708	TOTAL	\$7,420,442	
ш	DI	0			Fathmata	
#	Phase	Comment			Estimate	

Job#	Phase	Comment	Estimate
	PE		\$1,063,712
	RW	20% of CN Costs	\$487,167
	RW	RW Acquisition	\$455,270
		Utility Relocation	
	CN	Quantity Take-off Estimate	\$5,318,560

Right of Way						
Qty.	Unit	R/W Type	Unit Price	Multiplier	Cost	
7041	SF	Fee Taking (Commercial)	\$25.16	2.75	\$487,166.79	
0	SF	Fee Taking (Residential)	\$0.00	2.75	\$0.00	
1	LS	Utility RW Project	\$0.00	0.00	\$455,269.72	
0	EA	Total Take (Commercial)	\$0.00	0.00	\$0.00	
				Total	\$942,436.51	

	% PE	CN	PE Cost
PE Estimate	20%	\$5,318,559.56	\$1,063,711.91

Assumptions:

1' of regular excavation required in area of pavement expansion & limits of construction 1.5" surface course, 2" intermediate course, 8" base course pavement & 8" of aggregate Silt Fence required over length of project