

**5 Points - Two-Way Monroe Street
Preliminary Cost Estimate - Alternative A**

Enter Data
Computed Data

PAVING SECTION

| Length | Width | Sq Ft | |
|--------|-------|-------|------------------|
| 1- 2" | | 0 | 2" = 8.8 sy/ton |
| 2- 3" | | | 3" = 5.79 sy/ton |
| 3- 6" | | | 6" = 2.93 sy/ton |

a. Surface:
1- 2" Superpave, Type C, 160 Gyration, PG 76-22 (carbonate stone) (401007) Tons

b. Base:
2- 3" Superpave, Type B, 160 Gyration, PG 76-22 (401016) Tons
3- 6" Superpave, Bituminous Concrete Base Course, 160 Gyration, PG 64-22 (401021) Tons

c. Subbase:
4- 8 inches of Graded Aggregate Base Course, Type B (301001) CY

| | NO Contingency | % Contingency |
|------------------------------------|-----------------|-----------------|
| 1. GRADING | \$74,000 | \$96,200 |
| See Earthwork Summary Sheet | | |
| a. Excavation 2,000 CY @ \$26.00 = | \$52,000 | \$67,600 |
| b. Borrow 1,000 CY @ \$22.00 = | \$22,000 | \$28,600 |
| Total | \$74,000 | \$96,200 |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| 2. DRAINAGE | \$401,179 | \$521,532 |
| Stormwater Management 25 (Percentage of 1,3&5) | \$401,179 | \$521,532 |
| 0 EA \$100,000.00 per EA = | \$0 | \$0 |
| Total | \$401,179 | \$521,532 |

| | NO Contingency | % Contingency |
|---|------------------|--------------------|
| 3. PAVEMENT | \$426,514 | \$554,468 |
| 28,575 sf / 9 = 3,175 SY Say: 3,200 SY Full Depth Paving Only (1,2,3 & 4) | | |
| 103,875 sf / 9 = 11,542 SY Say: 11,600 SY Mill and Overlay Only (1a) | | |
| 24,613 sf / 9 = 2,735 SY Say: 2,800 SY HMA Path Only (1b, 4a) | | |
| a. Surface: | | |
| (1) 3,200 SY Div. by 8.80 sy/ton = 364 Ton,Times \$110.00 per Ton = \$40,000 | | |
| (1a) 11,600 SY Div. by 8.80 sy/ton = 1,318 Ton,Times \$110.00 per Ton = \$145,000 | | |
| (1b) 2,800 SY Div. by 8.80 sy/ton = 318 Ton,Times \$110.00 per Ton = \$35,000 | | |
| Total | \$220,000 | \$286,000 |
| b. Base: | | |
| (2) 3,200 SY Div. by 5.79 sy/ton = 553 Ton,Times \$100.00 per Ton = \$55,268 | | |
| (3) 3,200 SY Div. by 2.93 sy/ton = 1,092 Ton,Times \$80.00 per Ton = \$87,372 | | |
| Total | \$142,640 | \$185,432 |
| c. Subbase: | | |
| (4) 28,575 SF times 0.666667 ft / 27cf/cy = 706 CY, Times \$55.00 per CY = \$38,806 | | |
| (4a) 24,613 SF times 0.5 ft / 27cf/cy = 456 CY, Times \$55.00 per CY = \$25,069 | | |
| Total | \$63,874 | \$83,036.66 |

| | NO Contingency | % Contingency |
|--------------------------------------|----------------|---------------|
| 4. EROSION / SEDIMENT CONTROL | \$0 | \$0 |
| Included in Drainage | \$0 | \$0 |

| | NO Contingency | % Contingency |
|--|--------------------|--------------------|
| 5. MISCELLANEOUS | \$1,104,200 | \$1,435,460 |
| a. Curb (701012) 7,000 LF \$33.00 per LF = \$231,000 \$300,300 | | |
| b. 4" Sidewalk (705001) 0 times 0 = 53,000 SF \$10.00 per SF = \$530,000 \$689,000 | | |
| c. Underdrain (709001) 7,000 LF \$20.00 per LF = \$140,000 \$182,000 | | |
| d. CPM Schedule 0 LS \$0 \$0 | | |
| e. Clearing/Grubbing 1 LS \$10,000 \$13,000 | | |
| f. Field Office 0 LS \$0 \$0 | | |
| g. Milling (760010) 11,600 SY * 2" = 23,200 SY-IN,Times \$1.00 per SY-IN = \$23,200 \$30,160 | | |
| h. Chain Link Fencing (727000) 0 LF \$45.00 per LF = \$0 \$0 | | |
| i. Chain Link Gate (727010) 0 Each \$2,500.00 per Each = \$0 \$0 | | |
| j. Sawcutting (XXXXXX) 10,000 LF \$5.00 per LF = \$50,000 \$65,000 | | |
| k. PCC Removal (211001) 0 times 0 = 4,800 SY \$25.00 per SY = \$120,000 \$156,000 | | |
| Total | \$1,104,200 | \$1,435,460 |

| | NO Contingency | % Contingency |
|---|----------------|---------------|
| B. STRUCTURE CONSTRUCTION | \$0 | \$0 |
| 1. New Bridge 0 SF \$350.00 per SF = \$0 plus 50%= \$0 | | |
| 2. Old structure Removal \$0 plus 10%= \$0 | | |
| 3. Retaining Wall \$0 plus 10%= \$0 | | |
| 4. Box Culvert 0 SF \$250.00 per SF = \$0 plus 10%= \$0 | | |
| Total | \$0 | \$0 |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| C. LANDSCAPING | \$136,236 | \$177,106 |
| a. Topsoil / Seed / Mulch 5 (Percentage of 1,3&5) \$80,236 \$104,306 | | |
| b. Street Trees 140 \$400.00 per EA = \$56,000 \$72,800 assume 40 foot spacing | | |
| Total | \$136,236 | \$177,106 |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| D. MAINTENANCE OF TRAFFIC (including temporary tie-ins) | \$320,943 | \$417,226 |
| 20 (Percentage of 1,3&5) \$320,943 | | |

| | NO Contingency | % Contingency |
|---|------------------|------------------|
| E. PROJECT TRAFFIC ITEMS | \$557,094 | \$724,223 |
| 1. Signing Structures \$0 \$0 | | |
| 2. Roadway Lighting 70 \$7,500.00 per EA = \$525,000 \$682,500 assume 80 foot spacing | | |
| 3. Pavement Markings 2 (Percentage of 1,3&5) \$32,094 \$41,723 | | |
| Total | \$557,094 | \$724,223 |

| | NO Contingency | % Contingency |
|---|----------------|---------------|
| F. WETLAND MITIGATION | \$0 | \$0 |
| 0.0 Acres times 1 2:1 ratio = 0.0 Ac., Times \$200,000.00 per Ac. = \$0 \$0 | | |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| G. UTILITY RELOCATIONS IN CONTRACT | \$128,377 | \$166,890 |
| 1. Delmarva Electric \$0 \$0 | | |
| 2. Verizon \$0 \$0 | | |
| 3. Other Relocations 8 (Percentage of 1,3&5) \$128,377 \$166,890 | | |
| Total | \$128,377 | \$166,890 |

| | NO Contingency | % Contingency |
|--------------------|--------------------|--------------------|
| H. SUBTOTAL | \$3,148,543 | \$4,093,105 |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| I. MISCELLANEOUS ITEMS | \$629,709 | \$818,621 |
| 20 (Percentage of H) \$629,709 \$818,621 | | |

| | NO Contingency | % Contingency |
|---|-----------------|------------------|
| J. CONTRACTOR'S CONSTRUCTION ENGINEERING | \$94,456 | \$122,793 |
| 3 (Percentage of H) \$94,456 \$122,793 | | |

| | NO Contingency | % Contingency |
|--|-----------------|------------------|
| K. INITIAL EXPENSE | \$94,456 | \$122,793 |
| 3 (Percentage of H) \$94,456 \$122,793 | | |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| L. CONSTRUCTION CONTINGENCY | \$314,854 | \$409,311 |
| 10 (Percentage of H) \$314,854 \$409,311 | | |

| | NO Contingency | % Contingency |
|---|--------------------|--------------------|
| M. TOTAL CONSTRUCTION COSTS (H thru L) | \$4,282,018 | \$5,566,623 |

| | NO Contingency | % Contingency |
|--|------------------|------------------|
| N. CONSTRUCTION ENGINEERING | \$642,303 | \$834,993 |
| 15 (Percentage of M) \$642,303 \$834,993 | | |

| | NO Contingency | % Contingency |
|--|--------------------|--------------------|
| O. TOTAL CONSTRUCTION COSTS (M + N) | \$4,924,320 | \$6,401,617 |

| | NO Contingency | % Contingency |
|--|----------------|---------------|
| P. REIMBURSABLE UTILITY RELOCATIONS BY OTHERS | \$0 | \$0 |
| \$0 DP Electric+ \$0 Verizon = \$0 | | |

| | NO Contingency | % Contingency |
|--|------------------|--------------------|
| Q. TRAFFIC SECTION ITEMS | \$916,047 | \$1,190,861 |
| 1. Signing 1 (Percentage of 1,3&5) \$16,047 \$20,861.28 | | |
| 2. Signals 3 EA \$250,000.00 per EA = \$750,000 \$975,000 | | |
| 3. Signal Modification 3 EA \$50,000.00 per EA = \$150,000 \$195,000 | | |
| Total | \$916,047 | \$1,190,861 |

| | NO Contingency | % Contingency |
|---|--------------------|--------------------|
| CONSTRUCTION PROJECT ESTIMATE (O thru Q) | \$5,840,368 | \$7,592,478 |

| | NO Contingency | % Contingency |
|----------------------------|----------------|---------------|
| HAZARDOUS MATERIALS | \$0 | \$0 |

5 Points - One-Way Monroe Street with Chestnut Street Extended
Preliminary Cost Estimate - Alternative B

Enter Data
 Computed Data

PAVING SECTION

| | Length | Width | Sq Ft | |
|-------------|--------|-------|-------|------------------|
| a. Surface: | | | | |
| 1- 2" | | | 0 | 2" = 8.8 sy/ton |
| b. Base: | | | | |
| 2 - 3" | | | | 3" = 5.79 sy/ton |
| 3 - 6" | | | | 6" = 2.93 sy/ton |
| c. Subbase: | | | | |
| 4 - 8 | | | | |

| | | |
|--|-------------------|----------------------------|
| | NO Contingency | % Contingency 30 |
|--|-------------------|----------------------------|

O18
 \$ used in CTP Est.

| | | |
|------------------------------------|-----------------|------------------|
| 1. GRADING | \$84,400 | \$109,720 |
| See Earthwork Summary Sheet | | |
| a. Excavation 2,400 CY @ \$26.00 = | \$62,400 | \$81,120 |
| b. Borrow 1,000 CY @ \$22.00 = | \$22,000 | \$28,600 |
| Total | \$84,400 | \$109,720 |

| | | |
|----------------------------|-----------------------|------------------|
| 2. DRAINAGE | \$456,156 | \$593,002 |
| 25 (Percentage of 1,3&5) | | |
| Stormwater Management 0 EA | \$100,000.00 per EA = | \$456,156 |
| | | \$593,002 |
| Total | \$456,156 | \$593,002 |

| | | |
|--------------------------|------------------|------------------------------------|
| 3. PAVEMENT | \$291,722 | \$379,239 |
| 17,092 sf / 9 = 1,899 SY | Say: 1,900 SY | Full Depth Paving Only (1,2,3 & 4) |
| 71,985 sf / 9 = 7,998 SY | Say: 8,000 SY | Mill and Overlay Only (1a) |
| 24,613 sf / 9 = 2,735 SY | Say: 2,800 SY | HMA Path Only (1b, 4a) |

| | | | | | | | | |
|---|--|--|--|--------------------|-----------|------------------|--------------------|--|
| a. Surface: | | | | | | | | |
| (1) 1,900 SY Div. by 8.80 sy/ton = 216 Ton,Times | | | | \$110.00 per Ton = | \$23,750 | | | |
| (1a) 8,000 SY Div. by 8.80 sy/ton = 909 Ton,Times | | | | \$110.00 per Ton = | \$100,000 | | | |
| (1b) 2,800 SY Div. by 8.80 sy/ton = 318 Ton,Times | | | | \$110.00 per Ton = | \$35,000 | | | |
| Total | | | | | | \$158,750 | \$206,375 | |
| b. Base: | | | | | | | | |
| (2) 1,900 SY Div. by 5.79 sy/ton = 328 Ton,Times | | | | \$100.00 per Ton = | \$32,815 | | | |
| (3) 1,900 SY Div. by 2.93 sy/ton = 648 Ton,Times | | | | \$80.00 per Ton = | \$51,877 | | | |
| Total | | | | | | \$84,692 | \$110,100 | |
| c. Subbase: | | | | | | | | |
| (4) 17,092 SF times 0.666667 ft / 27cf/cy = 422 CY, Times | | | | \$55.00 per CY = | \$23,211 | | | |
| (4a) 24,613 SF times 0.5 ft / 27cf/cy = 456 CY, Times | | | | \$55.00 per CY = | \$25,069 | | | |
| Total | | | | | | \$48,280 | \$62,764.20 | |

| | | |
|--------------------------------------|------------|------------|
| 4. EROSION / SEDIMENT CONTROL | \$0 | \$0 |
| Included in Drainage | | |
| | \$0 | |

| | | | |
|--|-----------------------|--------------------|--------------------|
| 5. MISCELLANEOUS | \$1,448,500 | \$1,883,050 | |
| a. Curb (701012) 10,000 LF | \$33.00 per LF = | \$330,000 | \$429,000 |
| b. 4" Sidewalk (705001) 0 times = 72,000 SF | \$10.00 per SF = | \$720,000 | \$936,000 |
| c. Underdrain (709001) 10,000 LF | \$20.00 per LF = | \$200,000 | \$260,000 |
| d. CPM Schedule 0 LS | | \$0 | \$0 |
| e. Clearing/Grubbing 1 LS | | \$10,000 | \$13,000 |
| f. Field Office 0 LS | | \$0 | \$0 |
| g. Milling (760010) 8,000 SY * 2" = 16,000 SY-IN,Times | \$1.00 per SY-IN = | \$16,000 | \$20,800 |
| h. Chain Link Fencing (727000) 0 LF | \$45.00 per LF = | \$0 | \$0 |
| i. Chain Link Gate (727010) 0 Each | \$2,500.00 per Each = | \$0 | \$0 |
| j. Sawcutting (XXXXXX) 10,000 LF | \$5.00 per LF = | \$50,000 | \$65,000 |
| k. PCC Removal (211001) 0 times = 4,900 SY | \$25.00 per SY = | \$122,500 | \$159,250 |
| Total | | \$1,448,500 | \$1,883,050 |

| | | | |
|----------------------------------|-------------------|------------|---------------|
| B. STRUCTURE CONSTRUCTION | \$0 | \$0 | |
| 1. New Bridge 0 SF | \$350.00 per SF = | \$0 | plus 50%= \$0 |
| 2. Old structure Removal | | \$0 | plus 10%= \$0 |
| 3. Retaining Wall | | \$0 | plus 10%= \$0 |
| 4. Box Culvert 0 SF | \$250.00 per SF = | \$0 | plus 10%= \$0 |
| Total | | \$0 | \$0 |

| | | | |
|---|-------------------|------------------|---------------------------------|
| C. LANDSCAPING | \$159,231 | \$207,000 | |
| a. Topsoil / Seed / Mulch 5 (Percentage of 1,3&5) | | \$91,231 | \$118,600 |
| b. Street Trees 170 | \$400.00 per EA = | \$68,000 | \$88,400 assume 40 foot spacing |
| Total | | \$159,231 | \$207,000 |

| | | |
|--|------------------|------------------|
| D. MAINTENANCE OF TRAFFIC (including temporary tie-ins) | \$364,924 | \$474,402 |
| 20 (Percentage of 1,3&5) | | |
| | | \$364,924 |

| | | | |
|--|---------------------|------------------|----------------------------------|
| E. PROJECT TRAFFIC ITEMS | \$711,492 | \$924,940 | |
| 1. Signing Structures 90 | \$7,500.00 per EA = | \$675,000 | \$877,500 assume 80 foot spacing |
| 2. Roadway Lighting | | \$36,492 | \$47,440 |
| 3. Pavement Markings 2 (Percentage of 1,3&5) | | \$0 | \$0 |
| Total | | \$711,492 | \$924,940 |

| | | | |
|--|------------------------|------------|-----|
| F. WETLAND MITIGATION | \$0 | \$0 | |
| 0.0 Acres times 1 2:1 ratio = 0.0 Ac., Times | \$200,000.00 per Ac. = | \$0 | \$0 |

| | | | |
|--|------------------|------------------|------------------|
| G. UTILITY RELOCATIONS IN CONTRACT | \$145,970 | \$189,761 | |
| 1. Delmarva Electric | | \$0 | \$0 |
| 2. Verizon | | \$0 | \$0 |
| 3. Other Relocations 8 (Percentage of 1,3&5) | | \$145,970 | \$189,761 |
| Total | | \$145,970 | \$189,761 |

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|--------------------|--------------------|--------------------|
| H. SUBTOTAL | \$3,662,396 | \$4,761,115 |
|--------------------|--------------------|--------------------|

| | | | |
|-------------------------------|------------------|------------------|-----------|
| I. MISCELLANEOUS ITEMS | \$732,479 | \$952,223 | |
| 20 (Percentage of H) | | | |
| | | \$732,479 | \$952,223 |

| | | | |
|---|------------------|------------------|-----------|
| J. CONTRACTOR'S CONSTRUCTION ENGINEERING | \$109,872 | \$142,833 | |
| 3 (Percentage of H) | | | |
| | | \$109,872 | \$142,833 |

| | | | |
|---------------------------|------------------|------------------|-----------|
| K. INITIAL EXPENSE | \$109,872 | \$142,833 | |
| 3 (Percentage of H) | | | |
| | | \$109,872 | \$142,833 |

| | | | |
|------------------------------------|------------------|------------------|-----------|
| L. CONSTRUCTION CONTINGENCY | \$366,240 | \$476,111 | |
| 10 (Percentage of H) | | | |
| | | \$366,240 | \$476,111 |

| | | |
|---|--------------------|--------------------|
| M. TOTAL CONSTRUCTION COSTS (H thru L) | \$4,980,859 | \$6,475,116 |
|---|--------------------|--------------------|

| | | | |
|------------------------------------|------------------|------------------|-----------|
| N. CONSTRUCTION ENGINEERING | \$747,129 | \$971,267 | |
| 15 (Percentage of M) | | | |
| | | \$747,129 | \$971,267 |

| | | |
|--|--------------------|--------------------|
| O. TOTAL CONSTRUCTION COSTS (M + N) | \$5,727,987 | \$7,446,384 |
|--|--------------------|--------------------|

| | | |
|--|------------|------------|
| P. REIMBURSABLE UTILITY RELOCATIONS BY OTHERS | \$0 | \$0 |
| \$0 DP Electric+ \$0 Verizon = \$0 | | |

| | | | |
|------------------------------------|-----------------------|------------------|------------------|
| Q. TRAFFIC SECTION ITEMS | \$718,246 | \$933,720 | |
| 1. Signing 1 (Percentage of 1,3&5) | | \$18,246 | \$23,720.09 |
| 2. Signals 2 EA | \$250,000.00 per EA = | \$500,000 | \$650,000 |
| 3. Signal Modification 4 EA | \$50,000.00 per EA = | \$200,000 | \$260,000 |
| Total | | \$718,246 | \$933,720 |

| | | |
|---|--------------------|--------------------|
| CONSTRUCTION PROJECT ESTIMATE (O thru Q) | \$6,446,234 | \$8,380,104 |
|---|--------------------|--------------------|

| | |
|----------------------------|------------|
| HAZARDOUS MATERIALS | \$0 |
|----------------------------|------------|

5 Points - Private Monroe Street/Two Way Maryland Avenue
Preliminary Cost Estimate - Alternative C

Enter Data
 Computed Data

PAVING SECTION

| | Length | Width | Sq Ft | |
|-------------|--------|-------|-------|------------------|
| a. Surface: | | | | |
| 1- 2" | | | 0 | 2" = 8.8 sy/ton |
| b. Base: | | | | |
| 2 - 3" | | | | 3" = 5.79 sy/ton |
| 3 - 6" | | | | 6" = 2.93 sy/ton |
| c. Subbase: | | | | |
| 4 - 8 | | | | |

| | NO Contingency | % Contingency |
|------------------------------------|-----------------|-----------------|
| 1. GRADING | \$61,000 | \$79,300 |
| See Earthwork Summary Sheet | | |
| a. Excavation 1,500 CY @ \$26.00 = | \$39,000 | \$50,700 |
| b. Borrow 1,000 CY @ \$22.00 = | \$22,000 | \$28,600 |
| Total | \$61,000 | \$79,300 |

| | | |
|--|------------------|------------------|
| 2. DRAINAGE | \$401,092 | \$521,419 |
| Stormwater Management 25 (Percentage of 1,3&5) | \$401,092 | \$521,419 |
| 0 EA \$100,000.00 per EA = | \$0 | \$0 |
| Total | \$401,092 | \$521,419 |

| | NO Contingency | % Contingency |
|---|------------------|--------------------|
| 3. PAVEMENT | \$325,567 | \$423,238 |
| 14,522 sf / 9 = 1,614 SY Say: 1,700 SY Full Depth Paving Only (1,2,3 & 4) | | |
| 106,606 sf / 9 = 11,845 SY Say: 11,900 SY Mill and Overlay Only (1a) | | |
| 24,613 sf / 9 = 2,735 SY Say: 2,800 SY HMA Path Only (1b, 4a) | | |
| a. Surface: | | |
| (1) 1,700 SY Div. by 8.80 sy/ton = 193 Ton,Times \$110.00 per Ton = \$21,250 | | |
| (1a) 11,900 SY Div. by 8.80 sy/ton = 1,352 Ton,Times \$110.00 per Ton = \$148,750 | | |
| (1b) 2,800 SY Div. by 8.80 sy/ton = 318 Ton,Times \$110.00 per Ton = \$35,000 | | |
| Total | \$205,000 | \$266,500 |
| b. Base: | | |
| (2) 1,700 SY Div. by 5.79 sy/ton = 294 Ton,Times \$100.00 per Ton = \$29,361 | | |
| (3) 1,700 SY Div. by 2.93 sy/ton = 580 Ton,Times \$80.00 per Ton = \$46,416 | | |
| Total | \$75,777 | \$98,511 |
| c. Subbase: | | |
| (4) 14,522 SF times 0.666667 ft / 27cf/cy = 359 CY, Times \$55.00 per CY = \$19,721 | | |
| (4a) 24,613 SF times 0.5 ft / 27cf/cy = 456 CY, Times \$55.00 per CY = \$25,069 | | |
| Total | \$44,790 | \$58,227.04 |

| | | |
|--------------------------------------|------------|------------|
| 4. EROSION / SEDIMENT CONTROL | \$0 | \$0 |
| Included in Drainage | \$0 | \$0 |

| | | |
|--|--------------------|--------------------|
| 5. MISCELLANEOUS | \$1,217,800 | \$1,583,140 |
| a. Curb (701012) 8,000 LF \$33.00 per LF = \$264,000 \$343,200 | | |
| b. 4" Sidewalk (705001) 0 times 0 = 59,000 SF \$10.00 per SF = \$590,000 \$767,000 | | |
| c. Underdrain (709001) 8,000 LF \$20.00 per LF = \$160,000 \$208,000 | | |
| d. CPM Schedule 0 LS \$0 \$0 | | |
| e. Clearing/Grubbing 1 LS \$10,000 \$13,000 | | |
| f. Field Office 0 LS \$0 \$0 | | |
| g. Milling (760010) 11,900 SY * 2" = 23,800 SY-IN,Times \$1.00 per SY-IN = \$23,800 \$30,940 | | |
| h. Chain Link Fencing (727000) 0 LF \$45.00 per LF = \$0 \$0 | | |
| i. Chain Link Gate (727010) 0 Each \$2,500.00 per Each = \$0 \$0 | | |
| j. Sawcutting (XXXXXX) 10,000 LF \$5.00 per LF = \$50,000 \$65,000 | | |
| k. PCC Removal (211001) 0 times 0 = 4,800 SY \$25.00 per SY = \$120,000 \$156,000 | | |
| Total | \$1,217,800 | \$1,583,140 |

| | | |
|---|------------|------------|
| B. STRUCTURE CONSTRUCTION | \$0 | \$0 |
| 1. New Bridge 0 SF \$350.00 per SF = \$0 plus 50%= \$0 | | |
| 2. Old structure Removal \$0 plus 10%= \$0 | | |
| 3. Retaining Wall \$0 plus 10%= \$0 | | |
| 4. Box Culvert 0 SF \$250.00 per SF = \$0 plus 10%= \$0 | | |
| Total | \$0 | \$0 |

| | | |
|--|------------------|------------------|
| C. LANDSCAPING | \$144,218 | \$187,484 |
| a. Topsoil / Seed / Mulch 5 (Percentage of 1,3&5) \$80,218 \$104,284 | | |
| b. Street Trees 160 \$400.00 per EA = \$64,000 \$83,200 assume 40 foot spacing | | |
| Total | \$144,218 | \$187,484 |

| | | |
|--|------------------|------------------|
| D. MAINTENANCE OF TRAFFIC (including temporary tie-ins) | \$320,873 | \$417,136 |
| 20 (Percentage of 1,3&5) \$320,873 | | |

| | | |
|---|------------------|------------------|
| E. PROJECT TRAFFIC ITEMS | \$632,087 | \$821,714 |
| 1. Signing Structures \$0 \$0 | | |
| 2. Roadway Lighting 80 \$7,500.00 per EA = \$600,000 \$780,000 assume 80 foot spacing | | |
| 3. Pavement Markings 2 (Percentage of 1,3&5) \$32,087 \$41,714 | | |
| Total | \$632,087 | \$821,714 |

| | | |
|---|------------|------------|
| F. WETLAND MITIGATION | \$0 | \$0 |
| 0.0 Acres times 1 2:1 ratio = 0.0 Ac., Times \$200,000.00 per Ac. = \$0 \$0 | | |

| | | |
|--|------------------|------------------|
| G. UTILITY RELOCATIONS IN CONTRACT | \$128,349 | \$166,854 |
| 1. Delmarva Electric \$0 \$0 | | |
| 2. Verizon \$0 \$0 | | |
| 3. Other Relocations 8 (Percentage of 1,3&5) \$128,349 \$166,854 | | |
| Total | \$128,349 | \$166,854 |

| | | |
|--------------------|--------------------|--------------------|
| H. SUBTOTAL | \$3,230,988 | \$4,200,284 |
|--------------------|--------------------|--------------------|

| | | |
|--|------------------|------------------|
| I. MISCELLANEOUS ITEMS | \$646,198 | \$840,057 |
| 20 (Percentage of H) \$646,198 \$840,057 | | |

| | | |
|---|-----------------|------------------|
| J. CONTRACTOR'S CONSTRUCTION ENGINEERING | \$96,930 | \$126,009 |
| 3 (Percentage of H) \$96,930 \$126,009 | | |

| | | |
|--|-----------------|------------------|
| K. INITIAL EXPENSE | \$96,930 | \$126,009 |
| 3 (Percentage of H) \$96,930 \$126,009 | | |

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| L. CONSTRUCTION CONTINGENCY | \$323,099 | \$420,028 |
| 10 (Percentage of H) \$323,099 \$420,028 | | |

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| M. TOTAL CONSTRUCTION COSTS (H thru L) | \$4,394,143 | \$5,712,386 |
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| N. CONSTRUCTION ENGINEERING | \$659,122 | \$856,858 |
| 15 (Percentage of M) \$659,122 \$856,858 | | |

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| O. TOTAL CONSTRUCTION COSTS (M + N) | \$5,053,265 | \$6,569,244 |
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| P. REIMBURSABLE UTILITY RELOCATIONS BY OTHERS | \$0 | \$0 |
| \$0 DP Electric+ \$0 Verizon = \$0 | | |

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| Q. TRAFFIC SECTION ITEMS | \$916,044 | \$1,190,857 |
| 1. Signing 1 (Percentage of 1,3&5) \$16,044 \$20,856.78 | | |
| 2. Signals 3 EA \$250,000.00 per EA = \$750,000 \$975,000 | | |
| 3. Signal Modification 3 EA \$50,000.00 per EA = \$150,000 \$195,000 | | |
| Total | \$916,044 | \$1,190,857 |

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| CONSTRUCTION PROJECT ESTIMATE (O thru Q) | \$5,969,309 | \$7,760,101 |
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| HAZARDOUS MATERIALS | \$0 |
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**5 Points - I-95 Split Ramp
Preliminary Cost Estimate - Alternative D**

Enter Data
Computed Data

PAVING SECTION

| | Length | Width | Sq Ft | |
|--|--------|-------|-------|------------------|
| a. Surface: | | | | |
| 1- 2" Superpave, Type C, 160 Gyration, PG 76-22 (carbonate stone) (401007) Tons | | | 0 | 2" = 8.8 sy/ton |
| b. Base: | | | | |
| 2- 3" Superpave, Type B, 160 Gyration, PG 76-22 (401016) Tons | | | | 3" = 5.79 sy/ton |
| 3- 6" Superpave, Bituminous Concrete Base Course, 160 Gyration, PG 64-22 (401021) Tons | | | | 6" = 2.93 sy/ton |
| c. Subbase: | | | | |
| 4- 8 inches of Graded Aggregate Base Course, Type B (301001) CY | | | | |

| | NO Contingency | % Contingency |
|------------------------------------|-----------------|------------------|
| 1. GRADING | \$79,200 | \$102,960 |
| See Earthwork Summary Sheet | | |
| a. Excavation 2,200 CY @ \$26.00 = | \$57,200 | \$74,360 |
| b. Borrow 1,000 CY @ \$22.00 = | \$22,000 | \$28,600 |
| Total | \$79,200 | \$102,960 |

O18
\$ used in CTP Est.

| | | |
|--|------------------|------------------|
| 2. DRAINAGE | \$446,808 | \$580,851 |
| 25 (Percentage of 1,3&5) | | |
| Stormwater Management 0 EA \$100,000.00 per EA = | \$446,808 | \$580,851 |
| Total | \$446,808 | \$580,851 |

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| 3. PAVEMENT | \$452,734 | \$588,554 |
| 33,711 sf / 9 = 3,746 SY Say: 3,800 SY Full Depth Paving Only (1,2,3 & 4) | | |
| 92,774 sf / 9 = 10,308 SY Say: 10,400 SY Mill and Overlay Only (1a) | | |
| 24,613 sf / 9 = 2,735 SY Say: 2,800 SY HMA Path Only (1b, 4a) | | |
| a. Surface: | | |
| (1) 3,800 SY Div. by 8.80 sy/ton = 432 Ton,Times \$110.00 per Ton = \$47,500 | | |
| (1a) 10,400 SY Div. by 8.80 sy/ton = 1,182 Ton,Times \$110.00 per Ton = \$130,000 | | |
| (1b) 2,800 SY Div. by 8.80 sy/ton = 318 Ton,Times \$110.00 per Ton = \$35,000 | | |
| Total | \$212,500 | \$276,250 |
| b. Base: | | |
| (2) 3,800 SY Div. by 5.79 sy/ton = 656 Ton,Times \$100.00 per Ton = \$65,630 | | |
| (3) 3,800 SY Div. by 2.93 sy/ton = 1,297 Ton,Times \$80.00 per Ton = \$103,754 | | |
| Total | \$169,385 | \$220,200 |
| c. Subbase: | | |
| (4) 33,711 SF times 0.666667 ft /27cf/cy = 832 CY, Times \$55.00 per CY = \$45,780 | | |
| (4a) 24,613 SF times 0.5 ft /27cf/cy = 456 CY, Times \$55.00 per CY = \$25,069 | | |
| Total | \$70,849 | \$92,103.92 |

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| 4. EROSION / SEDIMENT CONTROL | \$0 | \$0 |
| Included in Drainage | \$0 | |

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| 5. MISCELLANEOUS | \$1,255,300 | \$1,631,890 |
| a. Curb (701012) 9,000 LF \$33.00 per LF = \$297,000 \$386,100 | | |
| b. 4" Sidewalk (705001) 0 times 0 = 57,000 SF \$10.00 per SF = \$570,000 \$741,000 | | |
| c. Underdrain (709001) 9,000 LF \$20.00 per LF = \$180,000 \$234,000 | | |
| d. CPM Schedule 0 LS \$0 \$0 | | |
| e. Clearing/Grubbing 1 LS \$10,000 \$13,000 | | |
| f. Field Office 0 LS \$0 \$0 | | |
| g. Milling (760010) 10,400 SY * 2" = 20,800 SY-IN,Times \$1.00 per SY-IN = \$20,800 \$27,040 | | |
| h. Chain Link Fencing (727000) 0 LF \$45.00 per LF = \$0 \$0 | | |
| i. Chain Link Gate (727010) 0 Each \$2,500.00 per Each = \$0 \$0 | | |
| j. Sawcutting (XXXXXX) 10,000 LF \$5.00 per LF = \$50,000 \$65,000 | | |
| k. PCC Removal (211001) 0 times 0 = 5,100 SY \$25.00 per SY = \$127,500 \$165,750 | | |
| Total | \$1,255,300 | \$1,631,890 |

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| B. STRUCTURE CONSTRUCTION | \$11,606,000 | \$17,409,000 |
| 1. New Bridge 33,160 SF \$350.00 per SF = \$11,606,000 plus 50%= \$17,409,000 | | |
| 2. Old structure Removal \$0 plus 10%= \$0 | | |
| 3. Retaining Wall \$0 plus 10%= \$0 | | |
| 4. Box Culvert 0 SF \$250.00 per SF = \$0 plus 10%= \$0 | | |
| Total | \$11,606,000 | \$17,409,000 |

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| C. LANDSCAPING | \$149,362 | \$194,170 |
| a. Topsoil / Seed / Mulch 5 (Percentage of 1,3&5) \$89,362 \$116,170 | | |
| b. Street Trees 150 \$400.00 per EA = \$60,000 \$78,000 assume 40 foot spacing | | |
| Total | \$149,362 | \$194,170 |

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| D. MAINTENANCE OF TRAFFIC (including temporary tie-ins) | \$357,447 | \$464,681 |
| 20 (Percentage of 1,3&5) \$357,447 | | |

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|---|------------------|------------------|
| E. PROJECT TRAFFIC ITEMS | \$635,745 | \$826,468 |
| 1. Signing Structures \$0 \$0 | | |
| 2. Roadway Lighting 80 \$7,500.00 per EA = \$600,000 \$780,000 assume 80 foot spacing | | |
| 3. Pavement Markings 2 (Percentage of 1,3&5) \$35,745 \$46,468 | | |
| Total | \$635,745 | \$826,468 |

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|---|------------|------------|
| F. WETLAND MITIGATION | \$0 | \$0 |
| 0.0 Acres times 1 2:1 ratio = 0.0 Ac., Times \$200,000.00 per Ac. = \$0 \$0 | | |

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| G. UTILITY RELOCATIONS IN CONTRACT | \$142,979 | \$185,872 |
| 1. Delmarva Electric \$0 \$0 | | |
| 2. Verizon \$0 \$0 | | |
| 3. Other Relocations 8 (Percentage of 1,3&5) \$142,979 \$185,872 | | |
| Total | \$142,979 | \$185,872 |

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|--------------------|---------------------|---------------------|
| H. SUBTOTAL | \$15,125,574 | \$21,984,446 |
|--------------------|---------------------|---------------------|

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| I. MISCELLANEOUS ITEMS | \$3,025,115 | \$4,396,889 |
| 20 (Percentage of H) \$3,025,115 \$4,396,889 | | |

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|---|------------------|------------------|
| J. CONTRACTOR'S CONSTRUCTION ENGINEERING | \$453,767 | \$659,533 |
| 3 (Percentage of H) \$453,767 \$659,533 | | |

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| K. INITIAL EXPENSE | \$453,767 | \$659,533 |
| 3 (Percentage of H) \$453,767 \$659,533 | | |

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| L. CONSTRUCTION CONTINGENCY | \$1,512,557 | \$2,198,445 |
| 10 (Percentage of H) \$1,512,557 \$2,198,445 | | |

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| M. TOTAL CONSTRUCTION COSTS (H thru L) | \$20,570,781 | \$29,898,847 |
|---|---------------------|---------------------|

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| N. CONSTRUCTION ENGINEERING | \$3,085,617 | \$4,484,827 |
| 15 (Percentage of M) \$3,085,617 \$4,484,827 | | |

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| O. TOTAL CONSTRUCTION COSTS (M + N) | \$23,656,398 | \$34,383,674 |
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| P. REIMBURSABLE UTILITY RELOCATIONS BY OTHERS | \$0 | \$0 |
| \$0 DP Electric+ \$0 Verizon = \$0 | | |

| | | |
|--|------------------|--------------------|
| Q. TRAFFIC SECTION ITEMS | \$917,872 | \$1,193,234 |
| 1. Signing 1 (Percentage of 1,3&5) \$17,872 \$23,234.04 | | |
| 2. Signals 3 EA \$250,000.00 per EA = \$750,000 \$975,000 | | |
| 3. Signal Modification 3 EA \$50,000.00 per EA = \$150,000 \$195,000 | | |
| Total | \$917,872 | \$1,193,234 |

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|---|---------------------|---------------------|
| CONSTRUCTION PROJECT ESTIMATE (O thru Q) | \$24,574,270 | \$35,576,908 |
|---|---------------------|---------------------|

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|----------------------------|------------|
| HAZARDOUS MATERIALS | \$0 |
|----------------------------|------------|