

Wake County Convenience Center

Attachment A

March 25, 2019

Estimate of Probable Construction Costs - Site Work (Option 11)

Line No.	Item Description	Quantity	U/M	Unit Cost	Total Cost
	Demo				
	Remove existing concrete pavement	30.0	CY	\$100.00	\$3,000.00
	Remove existing asphalt pavement	1,000.0	SY	\$6.00	\$6,000.00
	Remove existing gravel pavement	1,100.0	CY	\$18.00	\$19,800.00
	Remove existing fencing + gates	1,500.0	LF	\$4.00	\$6,000.00
	Remove existing concrete barrier walls	2,000.0	FF	\$6.00	\$12,000.00
	Remove existing buildings / sheds	6,250.0	SF	\$5.00	\$31,250.00
	Remove existing signs	1.0	LS	\$3,000.00	\$3,000.00
	Remove bollards	12.0	EA	\$125.00	\$1,500.00
	Relocate containers / compactors	3.0	EA		
	Fine Grading (old convenience center site)	1.0	AC	\$5,000.00	\$5,000.00
	Seeding (old convenience center site)	1.0	AC	\$2,000.00	\$2,000.00
	- Category Subtotal				\$89,550.00
	Earthwork				
	Clear and grub	1.9	AC	\$3,500.00	\$6,650.00
	Grading	1.9	AC	\$5,000.00	\$9,500.00
	Fill Material	46,400.0	CY	\$30.00	\$1,392,000.00
	Unsuitable soil removal and replace with off-site soils	1,740.0	CY	\$30.00	\$52,200.00
	Silt fence + stone	1,075.0	LF	\$4.00	\$4,300.00
	Tree protection fence	1,075.0	LF	\$4.00	\$4,300.00
	Construction entrance	1.0	EA	\$2,500.00	\$2,500.00
	Erosion Control (sediment pond)	1.0	LS	\$10,000.00	\$10,000.00
	Temporary Seeding	1.9	AC	\$1,500.00	\$2,850.00
	- Category Subtotal				\$1,484,300.00
	Sitework				
	<i>- Pavement</i>				
	Asphalt Paving - Heavy duty	6,530.0	SY	\$45.00	\$293,850.00
	Asphalt Paving - Standard duty	3,050.0	SY	\$30.00	\$91,500.00
	Concrete Paving - Heavy Duty	3,500.0	SY	\$65.00	\$227,500.00
	Concrete Paving - Standard Duty	200.0	SY	\$40.00	\$8,000.00
	30" Curb & Gutter	1,855.0	LF	\$30.00	\$55,650.00
	Traffic Striping	1.0	LS	\$10,000.00	\$10,000.00
	Wheel Stops - Concrete	6.0	EA	\$100.00	\$600.00
	<i>- Dock Walls</i>				
	Concrete stairs	4.0	EA	\$3,000.00	\$12,000.00
	Steel runners	12.0	EA	\$8,500.00	\$102,000.00
	Steel wall cap	165.0	LF	\$25.00	\$4,125.00
	Dock Bumpers	12.0	EA	\$250.00	\$3,000.00
	Dock Wood Rails	15.0	EA		
	<i>- Retaining Walls</i>				
	SMU Wall (avg. 7' high)	5,650.0	FF	\$35.00	\$197,750.00
	CC Conc. Retaining Wall	2,000.0	FF	\$50.00	\$100,000.00
	HHW Conc. Dock Wall	1,000.0	FF	\$50.00	\$50,000.00

Wake County Convenience Center

March 25, 2019

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Line No.	Item Description	Quantity	U/M	Unit Cost	Total Cost
	- Misc.				
	Bollards - Pipe	50.0	EA	\$250.00	\$12,500.00
	Bollards - Flexible	50.0	EA	\$100.00	\$5,000.00
	Chain link fencing	2,650.0	LF	\$37.00	\$98,050.00
	Chain link fence gates - cantilever	2.0	EA	\$4,500.00	\$9,000.00
	Chain link fence gates - swing	4.0	EA	\$1,500.00	\$6,000.00
	Fencing - Guardrail	200.0	LF	\$75.00	\$15,000.00
	- Category Subtotal				\$1,301,525.00
	Utilities				
	Stormwater Improvements	1.0	LS	\$75,000.00	\$75,000.00
	Water Service Improvements	1.0	LS	\$20,000.00	\$20,000.00
	Sewer Improvements	1.0	LS	\$22,500.00	\$22,500.00
	Lighting Improvements	1.0	LS	\$25,000.00	\$25,000.00
	- Category Subtotal				\$142,500.00
	Buildings				
	Multi-Materials Pre-engineered Canopy	1.0	LS	\$100,000.00	\$100,000.00
	HHW Pre-engineered Canopy	1.0	LS	\$60,000.00	\$60,000.00
	HHW explosion proof containers	1.0	LS	\$120,000.00	\$120,000.00
	Attendent hut	1.0	LS	\$100,000.00	\$100,000.00
	- Category Subtotal				\$380,000.00
	Allowances				
	Security	1.0	LS	\$40,000.00	\$40,000.00
	Signage	1.0	LS	\$30,000.00	\$30,000.00
	Landscape	1.0	LS	\$60,000.00	\$60,000.00
	- Category Subtotal				\$130,000.00
	Subtotal of Probable Construction Cost				\$3,527,875.00
	Subtotal				\$3,527,875.00
	Design & Permitting Fees	0.15			\$529,181.25
	Subtotal				\$4,057,056.25
	General Requirements	0.08			\$324,564.50
	Subtotal				\$4,381,620.75
	G.C. Overhead & Fee	0.10			\$438,162.08
	Subtotal				\$4,819,782.83
	Performance Bonding / Insurance	0.02			\$96,395.66
	Subtotal				\$4,916,178.48
	Estimating Contingency	0.20			\$983,235.70
	Total Probable Construction Cost				\$5,899,414.18
	* NOTES:				

Wake County Convenience Center**March 25, 2019*****Estimate of Probable Construction Costs - Site Work (Option 11)***

Line No.	Item Description	Quantity	U/M	Unit Cost	Total Cost
	- The utility improvements include any demolition and removal of existing necessary.				
	- The fill numbers were calculated to assume raising the entire CC site to an elevation of 292' and the public works site to an elevation of 290'. With sites this large, any change in the new elevation alters the costs considerably.				
	- The stormwater number for the public works site includes underground detention for peak flow mitigation as well as collection.				
	- The lighting allowance is an assumption of cost. A lighting plan was not prepared for this estimate. Duke Energy would provide a design and overall cost during the construction document phase of the project.				
	- The security allowance is an assumption of cost based on previous costs on recent projects, such as the North Wake and South Wake Landfill redevelopment projects. A security plan was not prepared for this estimate.				
	- The landscape allowance is an assumption of cost based on previous costs on recent projects, such as the North Wake and South Wake Landfill redevelopment projects. A landscape plan was not prepared for this estimate.				

Morrisville Public Works

March 25, 2019

Estimate of Probable Construction Costs - Site Work (Option 11)

Line No.	Item Description	Quantity	U/M	Unit Cost	Total Cost
	Demo				
	Remove existing concrete pavement	30.0	CY	\$100.00	\$3,000.00
	Remove existing asphalt pavement	1,000.0	SY	\$6.00	\$6,000.00
	Remove existing gravel pavement	1,100.0	CY	\$18.00	\$19,800.00
	Remove existing fencing + gates	1,500.0	LF	\$4.00	\$6,000.00
	Remove existing concrete barrier walls	2,000.0	FF	\$6.00	\$12,000.00
	Remove existing buildings / sheds	6,250.0	SF	\$5.00	\$31,250.00
	Remove existing signs	1.0	LS	\$3,000.00	\$3,000.00
	- Category Subtotal				\$81,050.00
	Earthwork				
	Clear and grub	5.6	AC	\$3,500.00	\$19,600.00
	Grading	5.6	AC	\$5,000.00	\$28,000.00
	Fill Material	33,600.0	CY	\$30.00	\$1,008,000.00
	Unsuitable soil removal and replace with off-site soils	1,260.0	CY	\$30.00	\$37,800.00
	Silt fence + stone	1,160.0	LF	\$4.00	\$4,640.00
	Tree protection fence	1,160.0	LF	\$4.00	\$4,640.00
	Construction entrance	1.0	EA	\$2,500.00	\$2,500.00
	Erosion Control (sediment pond)	1.0	LS	\$10,000.00	\$10,000.00
	Temporary Seeding	5.6	AC	\$1,500.00	\$8,400.00
	- Category Subtotal				\$1,123,580.00
	Sitework				
	<i>- Pavement</i>				
	Asphalt Paving - Heavy duty	3,650.0	SY	\$45.00	\$164,250.00
	Asphalt Paving - Standard duty	1,060.0	SY	\$30.00	\$31,800.00
	Concrete Paving - Heavy Duty	390.0	SY	\$65.00	\$25,350.00
	Concrete Paving - Standard Duty	300.0	SY	\$40.00	\$12,000.00
	Gravel Paving	625.0	CY	\$65.00	\$40,625.00
	30" Curb & Gutter	2,250.0	LF	\$30.00	\$67,500.00
	Traffic Striping	1.0	LS	\$2,000.00	\$2,000.00
	Wheel Stops - Concrete	25.0	EA	\$100.00	\$2,500.00
	<i>- Retaining Walls</i>				
	SMU Wall (avg. 7' high)	7,500.0	FF	\$35.00	\$262,500.00
	Bin Block walls (6' high)	2,550.0	FF	\$15.00	\$38,250.00
	<i>- Misc.</i>				
	Bollards - Pipe	50.0	EA	\$250.00	\$12,500.00
	Chain link fencing	2,200.0	LF	\$37.00	\$81,400.00
	Chain link fence gates - cantilever	2.0	EA	\$4,500.00	\$9,000.00
	Chain link fence gates - swing	1.0	EA	\$1,500.00	\$1,500.00
	Fencing - Guardrail	200.0	LF	\$75.00	\$15,000.00
	- Category Subtotal				\$766,175.00
	Utilities				
	Stormwater Improvements	1.0	LS	\$75,000.00	\$75,000.00

Morrisville Public Works

March 25, 2019

Estimate of Probable Construction Costs - Site Work (Option 11)

Line No.	Item Description	Quantity	U/M	Unit Cost	Total Cost
	Water Service Improvements	1.0	LS	\$20,000.00	\$20,000.00
	Sewer Improvements	1.0	LS	\$22,500.00	\$22,500.00
	Lighting Improvements	1.0	LS	\$25,000.00	\$25,000.00
	- Category Subtotal				\$142,500.00
	Buildings				
	Admin Building (2-story)	8,000.0	SF	\$170.00	\$1,360,000.00
	3-Side Equipment Storage Pre-engineered Building	3,200.0	SF	\$60.00	\$192,000.00
	Salt and Sand Dome	1.0	EA	\$52,000.00	\$52,000.00
	Brine Station	1.0	EA	\$1,800.00	\$1,800.00
	Fleet Shop - Garage	3,200.0	SF	\$150.00	\$480,000.00
	Fleet Shop - Secure inventory	500.0	SF	\$60.00	\$30,000.00
	Workshop - Warehouse	6,500.0	SF	\$120.00	\$780,000.00
	- Category Subtotal				\$2,895,800.00
	Allowances				
	Security	1.0	LS	\$40,000.00	\$40,000.00
	Signage	1.0	LS	\$20,000.00	\$20,000.00
	Landscape	1.0	LS	\$60,000.00	\$60,000.00
	- Category Subtotal				\$120,000.00
	Subtotal of Probable Construction Cost				\$5,129,105.00
	Subtotal				\$5,129,105.00
	Design & Permitting Fees	0.15			\$769,365.75
	Subtotal				\$5,898,470.75
	General Requirements	0.08			\$471,877.66
	Subtotal				\$6,370,348.41
	G.C. Overhead & Fee	0.10			\$637,034.84
	Subtotal				\$7,007,383.25
	Performance Bonding / Insurance	0.02			\$140,147.67
	Subtotal				\$7,147,530.92
	Estimating Contingency	0.20			\$1,429,506.18
	Total Probable Construction Cost				\$8,577,037.10
	* NOTES:				
	- The utility improvements include any demolition and removal of existing necessary.				
	- The fill numbers were calculated to assume raising the entire CC site to an elevation of 292' and the public works site to an elevation of 290'. With sites this large, any change in the new elevation alters the costs considerably.				
	- The stormwater number for the public works site includes underground detention for peak flow mitigation as well as collection.				
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Morrisville Public Works**March 25, 2019*****Estimate of Probable Construction Costs - Site Work (Option 11)***

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	- The landscape allowance is an assumption of cost based on previous costs on recent projects, such as the North Wake and South Wake Landfill redevelopment projects. A landscape plan was not prepared for this estimate				