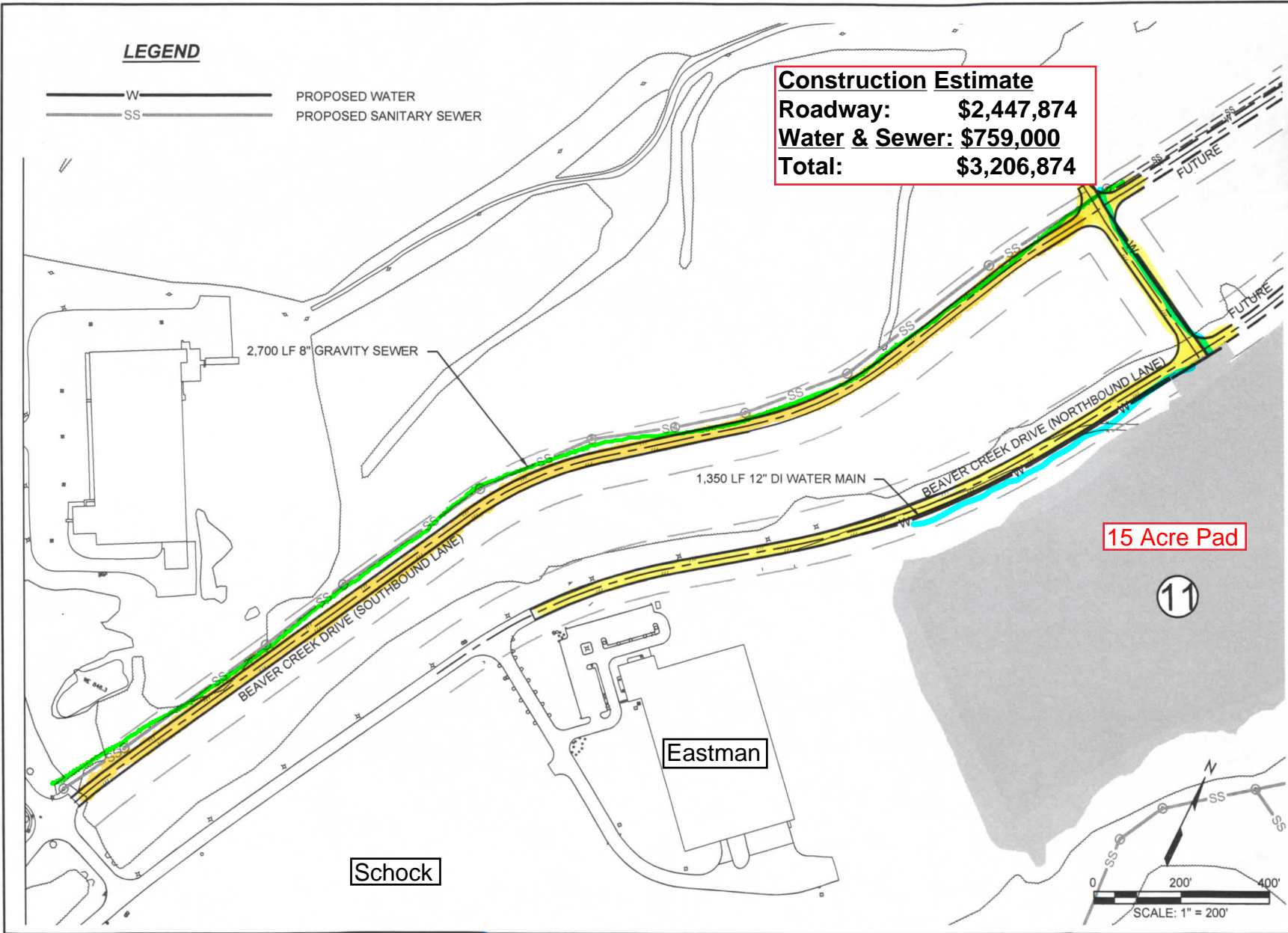


LEGEND

W PROPOSED WATER
 SS PROPOSED SANITARY SEWER

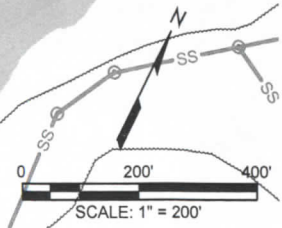
Construction Estimate
 Roadway: \$2,447,874
 Water & Sewer: \$759,000
 Total: \$3,206,874




Wiley Wilson
 CONSULTING ENGINEERS
 127 Nationwide Drive
 Lynchburg, Virginia 24502-4272

PROJECT: PATRIOT CENTRE AT BEAVER CREEK PHASE III
 TITLE: EXHIBIT WATERLINE & SEWER EXTENSION TO PROJECT MERCURY

COMM. NO. 213104	
DRAWN DGB	CHECKED TRW
DWG. REFERENCE NO. 001	
SKETCH NO. SK-1	
DATE 3/23/2015	REV.



**Henry County, Virginia Patriot Centre
Beaver Creek Drive Extension**

**Beaver Creek Drive Extension
North & Southbound Lanes and Crossover**

Item	Description	Unit	Est. Qty.	Unit Price	Extended Price
ROADWAY					
	Pavement (107+00 - 120+45) (200+00 - 227+50) (300+00 - 303+90)	LF	4,485	\$225.00	\$1,009,125
	2" Surface Course Asphalt SM 9.5A				
	4" Base Course Asphalt BM-25.0				
	12" Aggregate Base No. 21B				
	Pavement (100+00 - 107+00)	LF	700	\$200.00	\$140,000
	2" Surface Course Asphalt SM 9.5A				
	6" Aggregate Base No. 21B				
	CG-7	LF	5,185	\$40.00	\$207,400
	GR-9 Guardrail Terminal	EA	5	\$6,500.00	\$32,500
	GR-11 Guardrail Terminal	EA	3	\$3,500.00	\$10,500
	GR-2 Guardrail	LF	2,515	\$40.00	\$100,600
	CD-1 Underdrain	LF	150	\$40.00	\$6,000
	4" PVC Outlet Pipe	LF	188	\$30.00	\$5,640
	4" EW-12	EA	7	\$1200.00	\$8,400
	EC-1 Class II Riprap Ditch Lining	TON	55	\$100.00	\$5,500
	Subtotal				\$1,525,665
EROSION CONTROL - ROADWAY					
	Seeding Area Steeper than 3:1	AC	4	\$3,500.00	\$14,000
	Seeding Area Flatter than 3:1	AC	2	\$2,500.00	\$5,000
	Silt Fence	LF	5,573	\$5.00	\$27,865
	Outlet Protection	EA	15	\$1,500.00	\$22,500
	Culvert Inlet Protection	EA	4	\$1,500.00	\$6,000
	Inlet Protection	EA	27	\$500.00	\$13,500
	Construction Entrance	EA	1	\$5,000.00	\$5,000
	Diversion	LF	1,850	\$7.00	\$12,950
	Erosion Control Subtotal				\$106,815
STORM DRAINAGE - ROADWAY					
	15" RCP - Class III	LF	610	\$55.00	\$33,550
	15" EW-1	EA	7	\$1200.00	\$8,400
	18" RCP - Class III	LF	263	\$55.00	\$14,465
	18" EW-1	EA	3	\$1800.00	\$5,400
	24" RCP - Class V	LF	33	\$100.00	\$3,300
	36" RCP Class III	LF	145	\$125.00	\$18,125
	36" RCP Class V	LF	146	\$175.00	\$25,550
	36" EW-1	EA	4	\$2,500.00	\$10,000
	42" RCP	LF	67	\$175.00	\$11,725
	45" x 29" Elliptical Pipe Class III	LF	29	\$195.00	\$5,655
	EW-1APC for 45" x 29" Pipe	EA	1	\$7,000.00	\$7,000
	48" Inlet Base Structure	VF	81	\$450.00	\$36,450
	48" Doghouse Base	VF	11	\$550.00	\$6,050
	DI-2B Top	EA	12	\$3,500.00	\$42,000
	DI-2C Top	EA	1	\$3,500.00	\$3,500
	DI-7 Top with Type A Grate	EA	8	\$3,000.00	\$24,000
	DI-7 Top with Type B Grate	EA	2	\$3,000.00	\$6,000
	Storm Drainage Subtotal				\$261,170
ENVIRONMENTAL - ROADWAY					
	Stream Impacts	LF	312	\$350.00	\$109,200
	Wetlands	AC	0.07	\$75,000.00	\$5,250
	Environmental Subtotal				\$114,450
	Roadway - Estimated Construction Cost				\$2,008,100
	Contingencies			10.0%	\$200,810
	Mobilization			5.0%	\$100,405
	Roadway - Estimated Total Construction Cost				\$2,309,315
	Engineering, Construction Administration			5.5%	\$127,012
	(County) Administration, Legal, Finance, etc.			0.5%	\$11,547
	Total Project Cost				\$2,447,874

Henry County, Virginia Patriot Centre at Beaver Creek Phase III Utility Extension			Desc.:	Patriot Centre Phase III - Water and Wastewater	
			Date:	3/29/2022	
			Status:	Preliminary	
Bid Item No.	Description	Unit	Est. Qty.	Unit Price	Extended Price
ROAD & SITE					
1	Regular Excavation (Assumes ripable rock)	CY		\$5.00	\$0
2	Strip 3" Topsoil, Stockpile, and Respread	CY		\$5.00	\$0
3	Hoe-Ram	CY		\$75.00	\$0
4	Clearing & Grubbing	AC		\$2,000.00	\$0
5	1.5" Surface Course Asphalt SM 9.5A	LF		\$163.00	\$0
	2.5" Intermediate Course IM-19				
	4" Base Course Asphalt BM-25.0				
	12" Aggregate Base No. 21B				
6	CG-7			\$25.00	\$0
7	Guardrail	LF		\$32.00	\$0
	Road & Site Subtotal				\$0
EROSION CONTROL					
8	Stormwater Conveyance Channels	LF		\$4.00	\$0
9	Seeding Area Steeper than 3:1	AC		\$2,500.00	\$0
10	Seeding Area Flatter than 3:1	AC		\$2,000.00	\$0
11	Silt Fence	LF		\$3.50	\$0
12	Outlet Protection	EA		\$1,000.00	\$0
13	Culvert Inlet Protection	EA		\$1,000.00	\$0
14	Construction Entrance	EA		\$3,000.00	\$0
15	Stormwater Conveyance Channels EC-2	LF		\$4.00	\$0
16	Riprap	TON		\$45.00	\$0
	Erosion Control Subtotal				\$0
STORM DRAINAGE					
15	15" RCP - Class III	LF		\$42.00	\$0
16	15" EW-1	EA		\$800.00	\$0
17	18" RCP - Class III	LF		\$45.00	\$0
18	18" EW-1	EA		\$1,000.00	\$0
19	24" RCP - Class III	LF		\$75.00	\$0
20	24" EW-1	EA		\$1,300.00	\$0
21	30" RCP - Class III	LF		\$95.00	\$0
22	30" EW-1	EA		\$1,200.00	\$0
23	42" RCP Class III	LF		\$350.00	\$0
24	42" EW-2	EA		\$4,800.00	\$0
25	36" RCP Class III	LF		\$150.00	\$0
26	36" EW-1	EA		\$1,500.00	\$0
26	VDOT Curb and Yard Inlets	EA		\$3,000.00	\$0
27	VDOT MH-1	VF		\$350.00	\$0
28	Stormwater Man. Pond	EA		\$90,000.00	\$0
	Storm Drainage Subtotal				\$0
UTILITIES					
Water					
29	12" Water Line	LF	2,345	\$110.00	\$257,950
30	12" Gate Valves	EA	6	\$3,000.00	\$18,000
31	Fire Hydrants (1000 ft spacing)	EA	2	\$5,500.00	\$11,000
	Water Subtotal				\$286,950
Sanitary Sewer					
32	Clearing & Grubbing (30' corridor)	AC	1.9	\$5,000.00	\$9,346
33	8" SDR 35 PVC Sewer Pipe	LF	2,714	\$125.00	\$339,250
34	Manholes	VF	70	\$450.00	\$31,500
35	Frames and Covers	EA	10	\$1,000.00	\$10,000
36	Restoration	AC	1.9	\$2,500.00	\$4,673
	Sanitary Sewer Subtotal				\$394,769
SIGNAGE AND LANDSCAPING					
37	Signage and Landscaping	LS		\$5,000.00	\$0
	Landscaping Subtotal				\$0
	Estimated Construction Cost				\$682,000
	Contingencies			5.0%	\$34,000
	Mobilization			2.0%	\$14,000
	Estimated Total Construction Cost				\$730,000
ENVIRONMENTAL REMEDIATION					
38	Stream and Wetland Mitigation (On and Off Site)	LF		\$380.00	\$0
	Environmental Remediation Subtotal				\$0
	Construction Administration				\$22,000
	(County) Administration, Legal, Finance, etc.				\$7,000
	Total Project Costs				\$759,000