

**SIGNATURE PAGE**

**P-50-2023**

To the Monmouth County Board of County Commissioners:

**THE UNDERSIGNED HEREBY DECLARES THAT  
I (WE) HAVE CAREFULLY EXAMINED THE SPECIFICATIONS.  
I (WE) HEREBY CERTIFY PRICES QUOTED ARE IN ACCORDANCE  
WITH YOUR REQUIREMENTS.**

Company Name: Traffic Planning and Design, Inc.

Preparer's Name: Gregory Bitsko, PE, PP, (PRINT)  
Senior Project Manager & New Jersey Regional Leader

Signature: *Gregory Bitsko* February 22, 2024  
(DATE)

Address: 303 West Main Street, Suite 330  
Freehold, NJ 07728

Telephone No.: Office: 848.444.6105 Direct: 848.208.3428 Cell: 908.596.0858

Fax No.: 610.326.9410

E-Mail Address: GBitsko@TrafficPD.com  
**\*\*\* (This should be the email where Contracts would be sent) \*\*\***

Contact Person: Gregory Bitsko, PE, PP

FEIN: [REDACTED]  
(Federal Employee ID)  
BRC: [REDACTED]

(Business Registration Certificate)

(Revised 2/2017)





## DETAILED BREAKDOWN OF TASKS AND HOURS



PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY

Task	Description	PVII (Sr. Project Manager)	PVI (Project Manager)	PV (Technical Manager)	PIV (Project Engineer)	PIII (Engineer)	PII (Junior Engineer)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)		Labor Cost By Task
1	Field Survey (Geotrek)	0	0	0	0	0	0	0	0	0	0	0	\$22,236.00
2	Deed Research & ROW Documents (Geotrek)	0	0	0	0	0	0	0	0	0	0	0	\$5,301.00
3	Geotechnical Services (GED)	0	0	0	0	0	0	0	0	0	0	0	\$28,165.40
4	Hydrologic and Hydraulic Analysis (SWM)	0	0	0	0	0	0	0	0	0	0	0	\$36,450.00
5	Environmental Study & Permits	0	4	172	0	24	0	0	0	0	4	204	\$30,170.40
	1. Wetland delineation			16								16	\$2,412.80
	2. Individual Freshwater Wetland and Open Water Permit			60							2	62	\$9,178.00
	3. Individual Flood Hazard Permit			80							2	82	\$12,194.00
	4. Permit Plans		2			24						26	\$3,608.80
	5. Coordination with County & DEP		2	16								18	\$2,776.80
6	Alternatives Analysis	0	6	0	0	50	0	0	0	0	0	56	\$7,852.00
	Concept Roadway Design												
	1. Roadway Design Alternatives					8						8	\$1,081.60
	2. Cost Estimates & Narrative Report		2			8						10	\$1,445.60
	Concept Bridge Design												
	1. Bridge Alternatives Analysis & Narrative Report		2			8						10	\$1,445.60
	2. Bridge Geometric Sketches					16						16	\$2,163.20
	3. Bridge Cost Estimates		2			10						12	\$1,716.00



**DETAILED BREAKDOWN OF TASKS AND HOURS**



PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY

Task	Description	PVII (Sr. Project Manager)	PVI (Project Manager)	PV (Technical Manager)	PIV (Project Engineer)	PIII (Engineer)	PII (Junior Engineer)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)		Labor Cost By Task
<b>7</b>	<b>Bridge Design &amp; Contract Documents</b>	<b>8</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>288</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>353</b>	<b>\$51,569.40</b>
	<b>Interim Design</b>												
	1. General Plan and Elevation		2			12						14	\$1,986.40
	2. Demolition Plan		2			6						8	\$1,175.20
	3. Bridge Section and Working Points		2			10						12	\$1,716.00
	4. Staging Plans		2			10						12	\$1,716.00
	5. Pile Design		2			12						14	\$1,986.40
	6. Pile Plans		2			10						12	\$1,716.00
	7. Footing Design		2			12						14	\$1,986.40
	8. Footing Plans		2			10						12	\$1,716.00
	9. Abutment Design		2			12						14	\$1,986.40
	10. Abutment Plans		2			12						14	\$1,986.40
	11. Beam and Bearing Design		2			16						18	\$2,527.20
	12. Beam and Bearing Plans		2			16						18	\$2,527.20
	13. Deck Design		2			6						8	\$1,175.20
	14. Deck Plans		2			10						12	\$1,716.00
	15. Wingwall and Design		2			10						12	\$1,716.00
	16. Wingwall Plans and Sections		2			18						20	\$2,797.60
	17. Parapet / Railing Details		2			8						10	\$1,445.60
	18. Miscellaneous Details		2			8						10	\$1,445.60
	19. Rebar Charts		4			8						12	\$1,809.60
	20. Quantities		4			10						14	\$2,080.00
	21. QA/QC	4										4	\$946.40
	<b>Final Design</b>												
	1. General Plan and Elevation		2			4						6	\$904.80
	2. Demolition Plan		1			4						5	\$722.80
	3. Bridge Section and Working Points		1			4						5	\$722.80
	4. Staging Plans		1			4						5	\$722.80
	5. Pile Plans		1			4						5	\$722.80
	6. Footing Plans		1			4						5	\$722.80
	7. Abutment Plans		1			4						5	\$722.80
	8. Beam and Bearing Plans		1			8						9	\$1,263.60
	9. Deck Plans		1			4						5	\$722.80
	10. Wingwall Plans and Sections		1			8						9	\$1,263.60
	11. Parapet / Railing Details		1			4						5	\$722.80
	12. Miscellaneous Details		1			4						5	\$722.80
	13. Rebar Charts		1			8						9	\$1,263.60
	14. Quantities		1			8						9	\$1,263.60
	15. Quality Assurance	4										4	\$946.40



## DETAILED BREAKDOWN OF TASKS AND HOURS



PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY

Task	Description	PVII (Sr. Project Manager)	PVI (Project Manager)	PV (Technical Manager)	PIV (Project Engineer)	PIII (Engineer)	PII (Junior Engineer)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)		Labor Cost By Task
<b>8</b>	<b>Highway Design &amp; Contract Documents</b>	<b>24</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>198</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>276</b>	<b>\$3443.20</b>
	<b>Interim Design</b>												
	1. Key Sheet			1			2					3	\$369.20
	2. Typical Section (1" = 5")			1			10					11	\$1,242.80
	3. Plan Sheet Layout - Including Survey ties			3			8					11	\$1,326.00
	4. Construction Plan			3			16					19	\$2,199.60
	5. Profile and Alignment Design			3			16					19	\$2,199.60
	6. Profile Plan			2			6					8	\$956.80
	7. Guide Rail Design			2			4					6	\$738.40
	8. Grading Plans			2			8					10	\$1,175.20
	9. Signing & Striping Plan			2			8					10	\$1,175.20
	10. Staging Plans			3			16					19	\$2,199.60
	11. SESC Plans			3			12					15	\$1,762.80
	12. Cross Sections			4			20					24	\$2,787.20
	13. Construction Details			2			6					8	\$956.80
	14. Quantities			4			10					14	\$1,695.20
	15. Engineer's Estimate			2			8					10	\$1,175.20
	16. QA/QC	4										4	\$946.40
	17. Specifications	4		4								8	\$1,549.60
	<b>Final Design</b>												
	1. Key Sheet			1			1					2	\$260.00
	2. Typical Section (1" = 5")			1			1					2	\$260.00
	3. Plan Sheet Layout - Including Survey ties			1			2					3	\$369.20
	4. Construction Plan			1			4					5	\$587.60
	5. Profile			1			4					5	\$587.60
	6. Grading Plan			1			4					5	\$587.60
	7. Signing & Striping Plan			1			4					5	\$587.60
	8. Detour Plan			1			4					5	\$587.60
	9. SESC Plans			1			4					5	\$587.60
	10. Cross Sections			1			4					5	\$587.60
	11. Construction Details			1			2					3	\$369.20
	12. Quantities			1			8					9	\$1,024.40
	13. Engineer's Estimate			1			6					7	\$806.00
	14. Specifications	8										8	\$1,892.80
	15. Quality Assurance	8										8	\$1,892.80



## DETAILED BREAKDOWN OF TASKS AND HOURS



PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY

Task	Description	PVII (Sr. Project Manager)	PVI (Project Manager)	PV (Technical Manager)	PIV (Project Engineer)	PIII (Engineer)	PII (Junior Engineer)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)		Labor Cost By Task
<b>9</b>	<b>Traffic Design &amp; Contract Documents</b>	0	4	0	0	0	6	0	0	0	0	10	\$1,383.20
	1. Coordination with Local Authorities		2				2					4	\$582.40
	2. Evaluate traffic detour alternatives		2				4					6	\$800.80
<b>10</b>	<b>Utility Coordination &amp; Contract Documents</b>	0	0	15	0	23	0	0	0	0	0	38	\$5,971.60
	1. Prepare and Maintain Contact List			3		6						9	\$1,263.60
	2. Verify Existing Facilities			2		2						4	\$572.00
	3. Utility Coordination & Field Meeting (2)			3		3						6	\$858.00
	4. Evaluate Utility Relocations			3		3						6	\$858.00
	5. Prepare Utility Relocation Plans			3		6						9	\$1,263.60
	6. Document Utility Relocation/Coordination			1		3						4	\$556.40
<b>11</b>	<b>Meetings &amp; Community Involvement</b>	0	10	4	10	0	0	0	0	0	0	24	\$3,827.20
	1. Kick-off Meeting		2	2								4	\$665.60
	2. Meeting with Municipal Traffic Safety Officer			2	2							4	\$582.40
	3. Meetings w/ Local Authorities (assume 2)		2		2							4	\$644.80
	4. Pre-Application Meeting		2		2							4	\$644.80
	5. Project Status/Submission Meetings		4		4							8	\$1,289.60
<b>12</b>	<b>Project Management</b>	8	32	0	0	0	0	0	0	0	0	40	\$7,716.80
	1. Progress Reports (12)		6									6	\$1,092.00
	2. Project Coordination		20									20	\$3,640.00
	3. Organize Correspondence		6									6	\$1,092.00
	4. Quality Assurance	8										8	\$1,892.80
<b>13</b>	<b>Construction Support</b>	0	10	0	0	30	0	0	0	0	0	40	\$5,876.00
	1. Shop Drawings		4			30						34	\$4,784.00
	2. Requests for Information (RFIs)		4									4	\$728.00
	3. Substitutions		2									2	\$364.00
	Man-Hours	40	125	245	10	415	204	0	0	0	4	1,043	
	Direct Salary Rate (See Note 1)	\$91.00	\$70.00	\$58.00	\$54.00	\$52.00	\$42.00	\$38.00	\$32.00	\$30.00	\$25.00		
	Multiplier (See Note 2)	2.60											
	<b>TOTAL LABOR COST</b>	<b>\$9,464.00</b>	<b>\$22,750.00</b>	<b>\$36,946.00</b>	<b>\$1,404.00</b>	<b>\$56,108.00</b>	<b>\$22,276.80</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$260.00</b>		<b>\$149,208.80</b>

**PROJECT COST AND WORK HOUR PROPOSAL FORM**  
**GeoTrek Environmental and Surveying, LLC (Geotrek)**

P-50-2023

**PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY**



Task	Description	PVII (Sr. Project Manager)	PVI (Project Manager)	PV (Technical Manager)	PIV (Project Engineer)	PIII (Engineer)	PII (Junior Engineer)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)	Total Hours	Labor Cost By Task
1	Field Survey (Geotrek)	3	22	0	0	0	0	65	56	56	0	202	\$22,236.00
2	Deed Research & ROW Documents (Geotrek)	1	4	0	0	0	0	38	0	0	0	43	\$5,301.00
3	Geotechnical Services (CED)											0	\$0.00
4	Hydrologic and Hydraulic Analysis (SWM)											0	\$0.00
5	Environmental Study & Permits											0	\$0.00
6	Alternatives Analysis											0	\$0.00
7	Bridge Design & Contract Documents											0	\$0.00
8	Highway Design & Contract Documents											0	\$0.00
9	Traffic Design & Contract Documents											0	\$0.00
10	Utility Coordination & Contract Documents											0	\$0.00
11	Meetings & Community Involvement											0	\$0.00
12	Project Management											0	\$0.00
13	Construction Support											0	\$0.00
<b>Man-Hours</b>		<b>4</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>103</b>	<b>56</b>	<b>56</b>	<b>0</b>	<b>245</b>	
Direct Salary Rate (See Note 1)		\$65.00	\$55.00	\$1.00	\$1.00	\$1.00	\$1.00	\$39.00	\$38.00	\$24.00	\$1.00		
Multiplier (See Note 2)		3.00											
<b>TOTAL LABOR COST</b>		<b>\$780.00</b>	<b>\$4,290.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$12,051.00</b>	<b>\$6,384.00</b>	<b>\$4,032.00</b>	<b>\$0.00</b>		<b>\$27,537.00</b>

NOTES: CONSULTANT COMMENTS & CLARIFICATIONS:

<b>DIRECT EXPENSES</b>	
Reproduction	\$125.00
Postage/Delivery	\$75.50
Transportation	\$990.43
Out-of-Pocket Expenses	\$238.00
<b>SUBTOTAL-Misc. Expenses</b>	<b>\$1,428.93</b>
<b>TOTAL DIRECT EXPENSES</b>	<b>\$1,428.93</b>

<b>TOTAL LABOR COST</b>	<b>\$27,537.00</b>
<b>TOTAL DIRECT EXPENSES</b>	<b>\$1,428.93</b>
<b>TOTAL PROJECT COST</b>	<b>\$28,965.93</b>

**PROJECT COST AND WORK HOUR PROPOSAL FORM**  
Colliers Engineering & Design, Inc. (CED)

P-50-2023



**PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY**

Task	Description	PVII (Sr. Project Manager)	PVI (Project Manager)	PV (Technical Manager)	PIV (Project Engineer)	PIII (Engineer)	PII (Junior Engineer)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)	Total Hours	Labor Cost By Task
1	Field Survey (Geotrek)											0	\$0.00
2	Deed Research & ROW Documents (Geotrek)											0	\$0.00
3	Geotechnical Services (CED)	3	5	0	10	9	40	0	0	0	0	67	\$10,265.40
4	Hydrologic and Hydraulic Analysis (SWM)											0	\$0.00
5	Environmental Study & Permits											0	\$0.00
6	Alternatives Analysis											0	\$0.00
7	Bridge Design & Contract Documents											0	\$0.00
8	Highway Design & Contract Documents											0	\$0.00
9	Traffic Design & Contract Documents											0	\$0.00
10	Utility Coordination & Contract Documents											0	\$0.00
11	Meetings & Community Involvement											0	\$0.00
12	Project Management											0	\$0.00
13	Construction Support											0	\$0.00
<b>Man-Hours</b>		<b>3</b>	<b>5</b>	<b>0</b>	<b>10</b>	<b>9</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	
Direct Salary Rate (See Note 1)		\$96.25	\$78.81	\$0.00	\$63.52	\$52.20	\$40.85	\$0.00	\$0.00	\$0.00	\$0.00		
Multiplier (See Note 2)		3.00											
<b>TOTAL LABOR COST</b>		<b>\$866.25</b>	<b>\$1,182.15</b>	<b>\$0.00</b>	<b>\$1,905.60</b>	<b>\$1,409.40</b>	<b>\$4,902.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		<b>\$10,265.40</b>

NOTES: CONSULTANT COMMENTS & CLARIFICATIONS:

<b>DIRECT EXPENSES</b>	
Reproduction	
Postage/Delivery	
Subcontractor	\$17,900.00
Out-of-Pocket Expenses	
<b>SUBTOTAL-Misc. Expenses</b>	<b>\$17,900.00</b>
<b>TOTAL DIRECT EXPENSES</b>	<b>\$17,900.00</b>

<b>TOTAL LABOR COST</b>	<b>\$10,265.40</b>
<b>TOTAL DIRECT EXPENSES</b>	<b>\$17,900.00</b>
<b>TOTAL PROJECT COST</b>	<b>\$28,165.40</b>



**Stormwater Management Consulting, LLC (SWM)**  
**SWM - Traffic Planning & Design**  
**Replacement of Monmouth County Bridge HL-64**  
**Preliminary Scope of Work and Cost Estimate**  
**Hydrologic and Hydraulic Design and NJDEP Flood Hazard Area Permitting**  
**February 16, 2024**  
**Revised February 20, 2024**

**Note: Proposed Based Upon Need for Individual NJDEP FHA Permits**

<b>Task No.</b>	<b>Description</b>	<b>Estimated Hours</b>
1	Conduct Structure, Waterway, and Flood Plain Reconnaissance	4
2	Provide Required Field Survey Locations and Details to TPD	2
3	Develop Existing Condition HydroCAD Hydrologic Models	8
4	Develop Existing Condition HEC-RAS Hydraulic Models	10
5	Analyze and Evaluate Existing Condition Capacities and Road Overtoppings	4
6	Develop Preliminary Proposed Condition HEC-RAS Hydraulic Models	8
7	Analyze and Evaluate Pproposed Condition Capacities and Road Overtoppings	4
8	Review Preliminary Results with TPD and Monmouth County	6
9	Develop Proposed Condition HydroCAD Hydrologic Models	6
10	Develop Final Proposed Condition HEC-RAS Models	10
11	Review Final Results with TPD and Monmouth County	6
12	Provide Hydraulic Design Assistance to TPD	6
13	Attend NJDEP Pre-Application Meeting	4
14	Prepare Hydrologic and Hydraulic Design Report	24
15	Provide Design Data for Permit Applications	6
16	Address NJDEP Technical Questions	8
<b>Subtotal Estimated Hours =</b>		<b>116</b>
+ 25% Contingencies		29
<b>Total Estimated Hours =</b>		<b>145</b>
Hourly Rate for Engineering Services =		\$250
<b>Total Estimated Engineering Services =</b>		<b>\$36,250</b>
Estimated Expenses =		\$200
<b>Total Estimated Charge =</b>		<b>\$36,450</b>

**PROJECT COST AND WORK HOUR PROPOSAL FORM**  
**Hunter Research, Inc. (Hunter)**

P-50-2023

**PROFESSIONAL ENGINEERING SERVICES REGARDING THE DESIGN FOR THE REPLACEMENT OF BRIDGE HL-64 ON COUNTY ROUTE 21 (SOUTHARD AVENUE)  
 OVER MANASQUAN RIVER IN THE TOWNSHIP OF HOWELL, MONMOUTH COUNTY**



Task	Description	PV (Principal Investigator)	PV (Principal Investigator/ Report Manager)	PIII (Architectural Historian)	PIII (Historian)	ETIII (Senior Archaeologist)	ETII (Graphics Specialist)	ET5 (Senior Technician)	ET4 (Technician)	ET3 (Junior Technician)	Tech Sec (Admin.)	Total Hours	Labor Cost By Task	
1	Field Survey (Geotrek)											0	\$0.00	
2	Deed Research & ROW Documents (Geotrek)											0	\$0.00	
3	Geotechnical Services (CED)											0	\$0.00	
4	Hydrologic and Hydraulic Analysis (SWM)											0	\$0.00	
5	Environmental Study & Permits (Hunter)	8	4	2	24	16	6	0	0	0	0	60	\$5,304.00	
6	Alternatives Analysis											0	\$0.00	
7	Bridge Design & Contract Documents											0	\$0.00	
8	Highway Design & Contract Documents											0	\$0.00	
9	Traffic Design & Contract Documents											0	\$0.00	
10	Utility Coordination & Contract Documents											0	\$0.00	
11	Meetings & Community Involvement											0	\$0.00	
12	Project Management											0	\$0.00	
13	Construction Support											0	\$0.00	
<b>Man-Hours</b>		<b>8</b>	<b>4</b>	<b>2</b>	<b>24</b>	<b>16</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>		
Direct Salary Rate (See Note 1)		\$45.00	\$45.00	\$45.00	\$28.00	\$30.00	\$28.00	\$0.00	\$0.00	\$0.00	\$0.00			
Multiplier (See Note 2)		2.72												
<b>TOTAL LABOR COST</b>		<b>\$979.20</b>	<b>\$489.60</b>	<b>\$244.80</b>	<b>\$1,827.84</b>	<b>\$1,305.60</b>	<b>\$456.96</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		<b>\$5,304.00</b>	

NOTES: CONSULTANT COMMENTS & CLARIFICATIONS:

DIRECT EXPENSES	
Reproduction	\$50.00
Postage/Delivery	
Transportation	\$69.60
Out-of-Pocket Expenses	
<b>SUBTOTAL-Misc. Expenses</b>	<b>\$119.60</b>
<b>TOTAL DIRECT EXPENSES</b>	<b>\$119.60</b>

<b>TOTAL LABOR COST</b>	<b>\$5,304.00</b>
<b>TOTAL DIRECT EXPENSES</b>	<b>\$119.60</b>
<b>TOTAL PROJECT COST</b>	<b>\$5,423.60</b>