

SCOPE OF SERVICES  
PRELIMINARY AND FINAL DESIGN SERVICES FOR  
**PUMP STATION B**  
**MARIN ATMOSPHERIC RIVER CAPTURE PROJECT**

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**BACKGROUND**

Carollo Engineers (Carollo) is assisting the Marin Municipal Water District (District) with the preliminary and final design of the Atmospheric River Capture (ARC) Project. The ARC Project includes new conveyance facilities to pump water from the North Marin Aqueduct (NMA) to the Nicasio Reservoir along the pipeline alignment shown in Figure 1.

During the basis of design phase, Carollo and the District identified the need for a second booster pump station (i.e. Pump Station B) located near Stafford Lake. The final design of Pump Station B was not included in Carollo's scope of work for the ARC Project. The purpose of this scope is to develop the construction documents for Pump Station B.

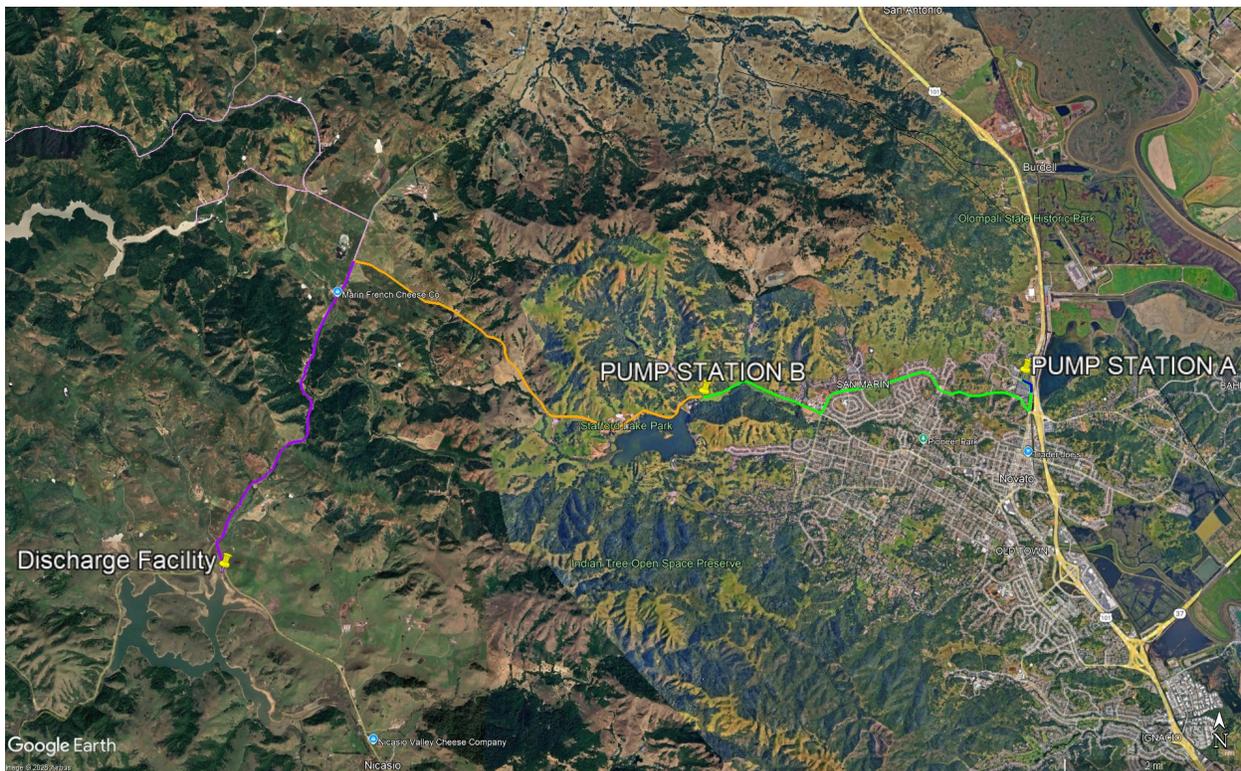


Figure 1 - Project Overview

**GENERAL ASSUMPTIONS**

This scope of work is based on the following general assumptions:

- Carollo's contract for the ARC Project dated May 29, 2025, included developing the basis of design report for two pump stations (Pump Station A and B) but it did not include developing Pump Station B construction documents (30%, 60%, 90% and Final design).

- This scope of work includes developing construction documents (30%, 60%, 90% and Final design) for Pump Station B.
- Carollo's surveyor (C&P) included the topographic survey of two pump stations (Pump Station A and B) in their original proposal for the ARC Project.
- Carollo's geotechnical engineer (MPE) included the geotechnical investigation for two pump stations (Pump Station A and B) in their original proposal for the ARC Project.
- Carollo's landscape architect (Siegfried) included landscape architecture design for two pump stations (Pump Station A and B) in their original proposal for the ARC Project.
- Carollo's cathodic protection engineer (JDH) included cathodic protection design for two pump stations (Pump Station A and B) in their original proposal for the ARC Project.
- This scope of work includes additional topographic survey of the pipeline from the North Marin Aqueduct to the Pump Station A site. This was not included in C&P's original proposal for the ARC Project. Refer to Attachment A for the detailed scope of work.

## **SCOPE OF WORK**

### **TASK 1 - PROJECT MANAGEMENT**

#### 1.01 - Project Administration

Consultant will administer the project to maintain project schedule and budget for the additional work to complete the preliminary and final design of Pump Station B. The project progress and budget status will be included in monthly progress reports that will be attached to billing invoices submitted to the District. Additionally, the monthly progress report will include a list of work completed for the invoice period and anticipated work efforts for the next invoice period. Carollo will invoice and administer this amendment under the ARC Project budget.

#### 1.02 - Implement Quality Management

Carollo will review all deliverables in accordance with the quality management program prior to being submitted to the District for review.

#### Task 1 Deliverables:

- Monthly progress reports.

#### Task 1 Assumptions:

- The design schedule for Pump Station B will be in parallel with the overall ARC Project schedule.
- The status of the Pump Station B preliminary and final design will be reported during Carollo's bi-weekly meetings with the District. The bi-weekly meetings are included in Carollo's original proposal for the ARC Project.

### **TASK 3 - FIELD INVESTIGATIONS**

#### 3.07 – Supplemental Topographic Survey

Carollo's subconsultant, Cinquini & Pastorini (C&P), will conduct supplemental topographic ground survey of the pipeline alignment from Pump Station A site to the North Marin Aqueduct. Refer to Attachment B for the detailed scope of work and extents of the topographic mapping.

Task 3 Deliverables:

- Topographic survey (AutoCAD format).
- Sealed hardcopy of Topographic Survey Map.

Task 3 Assumptions:

- Encroachment permits will be obtained from the County of Marin for work within their respective right-of-way.

**TASK 12 - DEVELOP PUMP STATION B CONSTRUCTION DOCUMENTS**

12.01 - Develop Preliminary (30%) Drawings and Specification TOC

Development of a 30% Project document submittal will be completed under this task. The 30% design documents will include the following:

- Pump Station B Site Plan (Plan view only)
- Mechanical Building Plan
- Electrical Single Line Diagram
- Technical Specifications Table of Contents (TOC)

One PDF of the plans (half-size), and technical specifications TOC will be provided to the District for review.

12.02 - Develop 60% Pump Station B Submittal Package

Development of a 60% Pump Station B document submittal will be completed under this task. One PDF of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

12.03 - Develop 60% Pump Station B Opinion of Probable Constriction Cost (OPCC)

Development of the 60% Pump Station B Opinion of Probable Constriction Cost (OPCC) will be completed under this task. The 60% Pump Station B OPCC will be provided to the District for review approximately two (2) weeks after the 60% Pump Station B plans and specification submittal.

12.04 - Conduct 60% Pump Station B Review Meeting

A design review meeting will be conducted to discuss the 60% Pump Station B plans and specification submittal and any questions that the District may have after the review period. It is assumed that the District will require two (2) weeks for the review period.

12.05 - Develop 90% Pump Station B Submittal Package

Development of a 90% Pump Station B document submittal will be completed under this task. Review comments from the 60% design review will be incorporated into the design and response to comments log will be developed and provided to the District. One pdf of the

plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 12.06 - Develop 90% Pump Station B Opinion of Probable Constriction Cost (OPCC)

Development of the 90% Pump Station B Opinion of Probable Constriction Cost (OPCC) will be completed under this task. The 90% Pump Station Bs OPCC will be provided to the District for review approximately two (2) weeks after the 90% Pump Station B plans and specification submittal. Review comments from the 60% design review of the Pump Stations OPCC will be incorporated and response to comments log will be developed and provided to the District.

#### 12.07 - Conduct 90% Pump Station Review Meeting

A design review meeting will be conducted to discuss the 90% Pump Station plans and specification submittal and any questions that the District may have after the review period. It is assumed that the District will require two (2) weeks for the review period.

#### 12.08 - Develop 100% (FINAL) Pump Station Submittal Package

Development of a 100% (FINAL) Pump Station document submittal will be completed under this task. Review comments from the 90% design review will be incorporated into the design and response to comments log will be developed and provided to the District. One pdf of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 12.09 - Develop 100% (FINAL) Pump Station Opinion of Probable Constriction Cost (OPCC)

Development of the 100% (FINAL) Pump Station Opinion of Probable Constriction Cost (OPCC) will be completed under this task. The 100% (FINAL) Pump Station OPCC will be provided to the District for review approximately two (2) weeks after the 100% Pipeline plans and specification submittal. Review comments from the 90% design review of the Pump Station OPCC will be incorporated and response to comments log will be developed and provided to the District.

#### Task 12 Deliverables:

- 30% Plans (Half size) and Technical Specifications TOC. (PDF)
- 60% Pump Station Submittal package. (PDF - Full size (22x34))
- 60% Pump Station Submittal package. (PDF - Half size (11x17))
- 60% Pump Station Review Meeting agenda and materials.
- 60% Pump Station Review comment response log.
- 90% Pump Station Submittal package. (PDF - Full size (22x34))
- 90% Pump Station Submittal package. (PDF - Half size (11x17))
- 90% Pump Station Review Meeting agenda and materials.
- 90% Pump Station Review comment response log.
- 100% (Final) Pump Station Submittal package. (PDF - Full size (22x34))
- 100% (Final) Pump Station Submittal package. (PDF - Half size (11x17))

#### Task 12 Assumptions:

- Pump station B to be designed as:
  - Initially 10.4 million gallons per day (mgd)

- Buildout of 30.0 mgd in the future.
- District 60% Pump Station review period to be two (2) weeks.
- District 90% Pump Station review period to be two (2) weeks.
- Review meetings to be in person and held at District offices.

### **TASK 13 – PUMP STATION B BID PHASE SERVICES**

#### 13.01 - Develop Conformed Documents

Development of Pump Station B conformed documents will be completed under this task. One PDF of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

### **ENGINEERING ESTIMATE**

Refer to Attachment A for the engineering estimate.

### **ASSUMPTIONS RELATED TO THE AGREEMENT**

- The District shall not be subject to any liability regarding provided data; however, in accordance with the standard of care delineated in Section 3 of the Agreement, the Consultant (Carollo) shall be entitled to use and reasonably rely upon all such data, information and services provided by the District or others in performing the Consultant's services under the Agreement.
- In providing opinions of cost, financial analyses, economic feasibility projections, and schedules potential projects, the Consultant will conduct research and analysis to provide best estimates, however the Consultant has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, the Consultant makes no warranty that the District's actual project costs, financial aspects, economic feasibility, or schedules will not reasonably vary in accordance with generally accepted professional standards from the Consultant's opinions, analyses, projections, or estimates.
- The Consultant is not responsible for damage or delay in performance caused by events beyond the reasonable control of the Consultant. In the event the Consultant's services are suspended, delayed or interrupted for the convenience and at the direction of the District or delays occur beyond the reasonable control of the Consultant, an equitable adjustment in the Consultant's time of performance and cost of the Consultant's personnel and subcontractors may be made.
- The services to be performed by the Consultant and its subconsultants are intended solely for the benefit of the District. No person or entity not a signatory to the Agreement, other than the District's consultants including subconsultants, on this Project, shall be entitled to rely on the Consultant's performance of its services hereunder, and no right to assert a claim against the Consultant by assignment of indemnity rights or otherwise, except as expressly set forth in Sections 3 and 14 of this Agreement, shall accrue to a third party as a result of the Agreement or the performance of the Consultant's services hereunder.

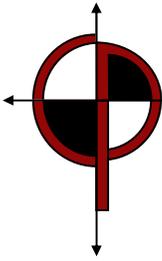
ATTACHMENT A

ESTIMATED ENGINEERING HOURS AND COSTS

MMWD PUMP STATION B PRELIMINARY AND FINAL DESIGN  
JANUARY 28, 2026



TASK	2026 Rate Schedule																							OTHER DIRECT COSTS				COST SUMMARY						
	Prudhel	Taylor	Marshall Kriss Zappone	Baune	Coulter	Whitehouse				Civil Mechanical Structural				Electrical I&C				Subtotals	PECE	Cingini & Pasorino, Inc.	Subtotals	Sub-consultant	5.0%	Misc. Costs and Printing	Travel	Total ODCs	Total Cost							
	PIC	PM	QM	DM	Pipeline Lead	Civil Engineer	Pump Station Lead	Structural Engineer	Electrical Engineer	I&C Engineer	SCADA Engineer	Trenchless Engineer	Corrosion Engineer	Hydraulic Engineer	Cost Est. Engineer	Permitting Engineer	Funding											Staff Engineer	Staff Engineer	GIS/CADD SR. Tech.	GIS/CADD Tech.	PM Admin Assistance	Clerical	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Hours	Budget	\$17.00	27	28	29	30	31	32	33	
<b>Task 1 - Project Management</b>																																		
1.01 Project Administration	8	16	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	48	200	\$56,824	\$3,400	\$0	\$0	\$0	\$500	\$250	\$4,150	\$60,974
1.02 Implement Quality Management	2	8	24	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	56	56	\$20,628	\$986	\$0	\$0	\$0	\$0	\$0	\$986	\$21,614
<b>Task 1 Total Hours</b>	10	24	24	56	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	56	256										
<b>Task 1 Total Budget</b>	\$3,860	\$9,264	\$9,264	\$21,616	\$11,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,912	\$9,296	\$77,452	\$4,386	\$0	\$0	\$0	\$600	\$250	\$5,136	\$82,588		
<b>Task 3 - Field Investigations</b>																																		
3.07 Supplemental Topographic Survey	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	4	24	24	\$5,948	\$384	\$28,054	\$28,054	\$1,403	\$0	\$0	\$29,841	\$35,789
<b>Task 3 Total Hours</b>	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	4	24										
<b>Task 3 Total Budget</b>	\$0	\$0	\$0	\$1,544	\$2,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$960	\$0	\$0	\$892	\$0	\$664	\$5,948	\$384	\$28,054	\$28,054	\$1,403	\$0	\$0	\$29,841	\$35,789			
<b>Task 12 - Develop Pump Station B Construction Documents</b>																																		
12.01 Develop Preliminary (30%) Drawings and Specification TOC	16	41	49	49	2	73	30	11	14	12	13	0	12	0	0	0	140	74	72	361	0	91	1060	\$262,322	\$16,960	\$0	\$0	\$0	\$0	\$0	\$16,960	\$279,282		
12.02 Develop 60% Pump Station Submittal Package	26	66	78	78	4	116	47	18	22	19	20	0	19	0	0	0	224	118	115	577	0	146	1693	\$444,266	\$28,781	\$0	\$0	\$0	\$0	\$0	\$28,781	\$473,047		
12.03 Develop 60% Pump Station Opinion of Probable Construction Costs	0	2	4	8	4	4	4	4	4	4	4	4	2	0	24	0	8	8	0	0	0	4	92	\$30,104	\$1,564	\$0	\$0	\$0	\$0	\$0	\$1,564	\$31,668		
12.04 Conduct 60% Pump Station Review Meeting	0	8	0	12	12	4	4	4	4	4	4	0	4	0	4	4	12	12	0	16	0	4	112	\$33,108	\$1,904	\$0	\$0	\$0	\$250	\$0	\$2,154	\$35,262		
12.05 Develop 90% Pump Station Submittal Package	16	41	49	49	2	73	30	11	14	12	13	0	12	0	0	0	140	74	72	361	0	91	1060	\$278,248	\$18,020	\$0	\$0	\$0	\$0	\$0	\$18,020	\$296,268		
12.06 Develop 90% Pump Station Opinion of Probable Construction Costs	0	2	4	8	4	4	4	4	4	4	4	4	2	0	24	0	8	8	0	0	0	4	92	\$30,104	\$1,564	\$0	\$0	\$0	\$0	\$0	\$1,564	\$31,668		
12.07 Conduct 90% Pump Station Review Meeting	0	8	0	12	12	4	4	4	4	4	4	0	4	0	4	4	12	12	0	16	0	4	112	\$33,108	\$1,904	\$0	\$0	\$0	\$250	\$0	\$2,154	\$35,262		
12.08 Develop 100% (FINAL) Pump Station Submittal Package	7	16	19	19	1	29	12	4	5	5	5	0	5	0	0	0	56	29	29	144	0	36	421	\$110,408	\$7,157	\$0	\$0	\$0	\$0	\$0	\$7,157	\$117,565		
12.09 Develop 100% (FINAL) Pump Station Opinion of Probable Construction Costs	0	2	4	8	0	4	2	2	2	2	2	2	0	24	0	4	4	4	0	0	0	4	68	\$23,040	\$1,156	\$0	\$0	\$0	\$0	\$0	\$1,156	\$24,196		
<b>Task 12 Total Hours</b>	65	166	207	243	41	311	137	62	73	66	69	10	62	0	80	8	604	339	298	1475	0	384	4710											
<b>Task 12 Total Budget</b>	\$25,090	\$71,796	\$79,902	\$93,798	\$11,521	\$87,391	\$44,114	\$19,964	\$23,506	\$21,252	\$22,218	\$3,860	\$19,964	\$0	\$30,880	\$3,088	\$0	\$144,960	\$83,733	\$80,928	\$328,925	\$0	\$63,744	\$1,244,708	\$79,010	\$0	\$0	\$0	\$500	\$0	\$79,510	\$1,324,218		
<b>Task 13 - Pump Station B Bid Phase Services</b>																																		
13.01 Develop Conformed Documents	1	2	2	2	0	4	1	1	1	1	1	0	1	0	0	0	7	4	4	18	0	5	55	\$15,247	\$990	\$0	\$0	\$0	\$0	\$0	\$990	\$16,237		
<b>Task 13 Total Hours</b>	1	2	2	2	0	4	1	1	1	1	1	0	1	0	0	0	7	4	4	18	0	5	55											
<b>Task 13 Total Budget</b>	\$409	\$818	\$818	\$818	\$0	\$1,192	\$341	\$341	\$341	\$341	\$341	\$0	\$341	\$0	\$0	\$0	\$1,776	\$1,048	\$1,192	\$4,248	\$0	\$880	\$15,247	\$990	\$0	\$0	\$0	\$0	\$0	\$990	\$16,237			
<b>Total Hours</b>	76	212	233	305	89	315	138	63	74	67	70	10	63	0	80	8	615	343	292	1497	48	449	6047											
<b>Total Cost</b>	\$ 29,359	\$ 81,878	\$ 89,984	\$ 117,776	\$ 25,009	\$ 88,583	\$ 44,455	\$ 20,305	\$ 23,847	\$ 21,593	\$ 22,559	\$ 3,860	\$ 20,305	\$ -	\$ 30,880	\$ 3,088	\$ -	\$ 147,898	\$ 84,781	\$ 82,120	\$ 334,065	\$ 12,912	\$ 74,584	\$ 1,343,355	\$ 84,770	\$ 28,054	\$ 28,054	\$ 1,403	\$ 1,000	\$ 250	\$ 115,477	\$ 1,458,832		



- ▲ BOUNDARY
- ▲ TOPOGRAPHIC
- ▲ CONSTRUCTION
- ▲ RAILROAD
- ▲ INFRASTRUCTURE
- ▲ HYDROGRAPHIC

January 15, 2026

Darren Baune, P.E.  
**Carollo**  
2795 Mitchell Drive  
Walnut Creek, CA 94595  
VIA EMAIL DBAUNER@CAROLLO.COM

**Re: Scope of Work to Provide Land Surveying Services – Additional Topographic Survey  
MMWD Atmospheric River Capture Project, Marin County, California**

Dear Darren:

Cinquini & Passarino, Inc. (C&P) is very pleased to present to you this scope of work and fee proposal for the professional land surveying support services for Marin Municipal Water District’s Atmospheric River Capture Project. We prepared the following scope of work to acquire additional ground based topographic surveys and right-of-way mapping in accordance with your request.

**SCOPE OF WORK**

**Additional Topographic & Right-of-way Survey**

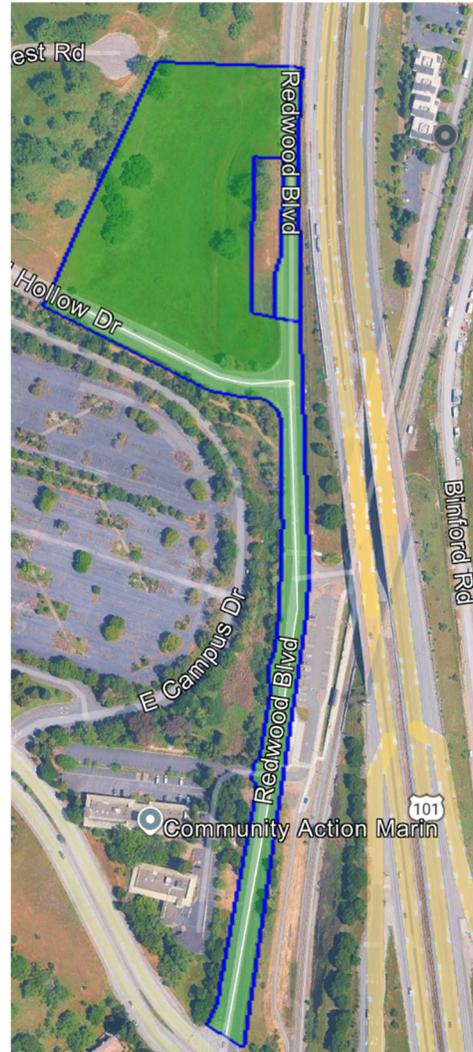
C&P will prepare additional ground based topographic survey base mapping along Redwood Boulevard and Wood Hollow Drive for the design the new pipeline. Redwood Boulevard will be mapped from 5 feet downslope from top of back to 5 feet downslope from top of back where no curb exists.

The survey will be performed to the same specifications as the base contract mapping.

*Deliverables: Sealed hardcopy of Topographic Survey Map. The Autocad “dwg” used to create the hardcopy will also be provided for your convenience. The mapping will be included in the delivered base mapping for the site.*

**PROJECT SCHEDULE**

The estimated timeline for the additional topographic survey will be 15 working days from authorization to proceed with said task.



Darren Baune, P.E.

**Carollo**

January 15, 2026

Page 2 of 2

**PROJECT FEE**

The estimated fee for the scope of work is:

Additional Topographic & Right-of-way Survey \$28,054.00.

Thank you for choosing Cinquini & Passarino, Inc. to be a part of your team. Please feel free to contact me at (707) 542-6268 if you have any questions or require additional information.

Very truly yours,

**CINQUINI & PASSARINO, INC.**

Anthony G. Cinquini, P.E., P.L.S.

Principal