



**MILLER PACIFIC
ENGINEERING GROUP**

June 5, 2018
File: 779.254O&Tpro.doc

San Rafael City Schools
c/o Cumming Corporation
505 14th Street, Suite 900
Oakland, California 94612

Attn: Ms. Teri Mathers

Re: Construction Observation and Testing Budget Estimate
Interim Classroom Structures
Venetia Valley K-8
San Rafael, California

Introduction

This letter includes our proposed scope of services and budget estimate for the construction phase of the interim classroom project at Venetia Valley K-8 located in San Rafael, California. We understand the project includes constructing 25-new temporary modular classroom structures to house students during construction of the new permanent campus structures. We anticipate the temporary classroom structures will be supported on shallow timber foundations placed directly on a gravel covered building pad. Asphalt paved pedestrian paths will connect the main campus to the temporary structures and some site utilities will also be constructed. The purpose of our construction observation and testing services is to form an opinion regarding the Contractor's compliance with the project plans and our geotechnical recommendations.

Based on our discussions with you and review of the project plans, we judge intermittent site observations and testing is appropriate during construction of the project. We anticipate observing and testing the following items:

- **Laboratory Testing:**
We will collect bulk samples of the soils and baserock utilized on the project to determine the maximum laboratory density and optimum moisture content. We have budgeted time to perform 3-laboratory compaction curves.
- **Subgrade Preparation Compaction Testing:**
We will perform intermittent site visits to perform field density tests (ASTM D 1557) on the compacted building pad subgrade. We have budgeted four site visits totaling 12-hours to perform this task.
- **Class 2 Aggregate Baserock Compaction Testing:**
We will perform intermittent site visits to perform field density tests (ASTM D 1557) on the compacted Class 2 Aggregate Baserock. We have budgeted four site visits totaling 8-hours to perform this task.

Napa Office:	■	Napa Valley Business Park	■	T (707) 265-7936	F (707) 265-7982
504 Redwood Blvd., Suite 220	■	Novato, California 94947	■	T (415) 382-3444	F (415) 382-3450

- **Geotechnical Consultation:**
We will be available to attend site meetings regarding the construction process, answering Contractor RFI's and other as needed geotechnical engineering consultation.
- **Other geotechnical items, as needed.**

We have not budgeted for concrete and/or asphalt sampling and testing. We can provide additional scope and budget to perform concrete and/or asphalt testing upon request. We will also provide a letter report summarizing our observations upon satisfactory completion of the project.

Budget Estimate

We will provide our services on a time and expense basis and the attached budget spreadsheet summarizes our anticipated site visits (number and duration) for the various work items. Based on the plans our discussions with the project team and experiences with similar projects, we estimate our fees will be approximately \$6,800 for the project. We can revise this estimate if provided with a construction schedule. Unknowns, such as contractor efficiency, the need for retesting inadequate work, unanticipated subsurface conditions, weather and other factors have been considered in preparing our budget estimate, but may still impact the final budget. We will prepare regularly scheduled invoices and update you on our budget status as the work progresses.

Please sign and return a copy of this letter when you would like to proceed. Feel free to contact us with any questions or concerns.

Sincerely,
MILLER PACIFIC ENGINEERING GROUP



Benjamin S. Pappas
Geotechnical Engineer No. 2786
(Expires 9/30/18)

Attachment: Budget Estimate Worksheet

Agreed:

Date

MILLER PACIFIC ENGINEERING GROUP
 Field Observation & Testing Budget Estimate Worksheet
 Venetia Valley K-8 Interim Classrooms
 San Rafael, California

Date: 6/05/18
 Project Number: 779.254
 By: BSP

FIELD COSTS					
	PER UNIT	PER HOUR	SITE VISIT	HALF DAY	FULL DAY
Senior Technician II	\$ 115.00				
Staff Engineer/Geologist III	\$ 115.00				
Staff Engineer/Geologist II	\$ 105.00		1	1	
Staff Engineer/Geologist I	\$ 95.00				
Prevailing Wage Group 3	\$ 140.00		2	4	
Weekday Overtime \$30 or Sun/Hol/Night \$40	\$ 40.00				
Field Vehicle/Equipment	\$ 9.00				
Nuclear Density Tests	\$ 8.00		6	12	
Miles	\$ 0.80		16	16	
		\$ -	\$ 445.80	\$ 773.80	\$ -

Work Item	Description	Estimated Days	HOURS	SITE VISIT	HALF DAY	FULL DAY
1.0	Site Grading	4		2	2	
2.0	Class 2 AB	4		4		
3.0						
4.0						
5.0						
6.0						
Totals			0	6	2	0

DOLLARS \$ - \$ 2,674.80 \$ 1,547.60 \$ -

Total Field Costs: \$ 4,222.40

LABORATORY TESTING

Task	Description	Quantity	Unit \$	Amount \$
1.0	Compaction Curve ASTM 1557	3	\$280	\$ 840.00
2.0	Compaction Curve CalTrans 216		\$350	\$ -
3.0	Asphalt Concrete - S-value, Gradation, M.C., Unit Wt. & % Oil		\$850	\$ -
4.0	Concrete Compression (per Cylinder)		\$40	\$ -
5.0	Shotcrete Panel Testing (per Panel) 3"		\$500	\$ -
6.0	R-value		\$390	\$ -
7.0	Sand Equivalent		\$135	\$ -
8.0	Durability		\$195	\$ -
9.0	Gradation/Sieve		\$150	\$ -
10.0	Class II AB Suite (Rvalue,Sieve, Durability & Sand Equiv)		\$950	\$ -
Total Lab Costs:				\$ 840.00

ENGINEERING/GEOLOGICAL CONSULT & REPORT

Personnel	Title	Hours	\$/Hour	Amount \$
SAS	Principal Eng/Geologist III		\$ 245.00	\$ -
MPM	Principal Eng/Geologist II		\$ 235.00	\$ -
DSC	Principal Eng/Geologist I		\$ 225.00	\$ -
EAD	Associate Engineer III		\$ 220.00	\$ -
BSP	Associate Engineer I	6	\$ 200.00	\$ 1,200.00
MFJ/RCA	Senior Engineer/Geologist I		\$ 165.00	\$ -
PDC	Project Engineer 2		\$ 135.00	\$ -
NGK/SLM/BAS	Project Engineer/Geologist I		\$ 125.00	\$ -
WGO / AJM	Sr. Tech II		\$ 115.00	\$ -
JTO	Staff III		\$ 115.00	\$ -
MMT/ENE/ZMS	Staff II		\$ 105.00	\$ -
NAR	Staff I		\$ 95.00	\$ -
KRB/MLT	Project Asst./Word Processor		\$ 80.00	\$ -
Total Engineering Costs:				\$ 1,200.00

Subtotal: \$ 6,262.40
Contingency: 10% \$ 626.24
Total: \$ 6,888.64

Use for Budget: \$ 6,800