LCC ENGINEERING & SURVEYING, INC.

PRINCIPALS
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FOUNDED 1954
Guenter K. Leptien
Frank J. Cronin
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October 14, 2020

San Leandro Unified School District
1145 Aladdin Ave
San Leandro, CA 94577

Attn: Ridge Greene, RGM Kramer

Re: San Leandro Unified School District (SLUSD)
San Leandro High School
Proposal for Surveying and Mapping Services

Dear Mr. Green,

LCC Engineering & Surveying, Inc. (LCC) is pleased to submit this proposal to provide land surveying and mapping services for the above referenced project.

SCOPE OF SERVICES AND ESTIMATE OF COST AND TIME;

Based on emails with you, we understand that a campus wide aerial topographic survey and mapping will be required for future campus Planning and construction, as well as ground level detailed survey and mapping for the new Gymnasium and Classroom Building and related improvements, which will be located in the center of campus and towards the south end parking lot (near the tennis courts) We have attached an exhibit (reviewed and approved by the District) showing the limits of the aerial surveys (outlined in red) and the limits of detailed ground survey (outlined in light blue) for the proposed survey and mapping.

We also understand that, within the main aerial limits, another firm will be performing underground utility locating and mapping. LCC will not be responsible for surveying the markings, however we will survey all surface utility boxes and will take several “check shots” so that the locator may incorporate their mapping with ours as seamlessly as possible.

Based on this information, LCC proposes to provide the following services and have also attached the “Estimated Hours and Cost by Task” spreadsheet for items work include herein:

Task 1 – Perform Aerial Surveys and Mapping (Including Utility Structures)
LCC Inc. will perform an aerial topographic survey (1”=20’ scale) with 1-foot contours of the campus (see attached mapping limits outlined in solid red). We will layout control points for future supplemental topo and will include several random topo shots used as a check of the aerial topo contours, line work and spot elevations provided by our subconsultant.

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We will establish flight control points and check shots for the aerial mapping described in this proposal utilizing RTK GPS, based on Control monuments and data from previous campus projects (per record drawings provided by the Client). Should the Client not have a preference of coordinate systems, or no control data available, we will use County GPS Control monuments of record (based on NAD83, with NAVD 88 elevations).

As an optional additional cost, we will include aerial mapping of the sports field outlined with a dashed red line on the exhibit, should the District authorize this additional "optional" task.

Color orthophotos (TIFF image files) have been included as an "optional" cost in this proposal. If selected, orthophotography will be delivered in tif/tfw format with a pixel resolution of 0.25 feet.

Although underground utility markings will be surveyed by others, LCC will survey all major surface utility structures on the campus within the area outlined in red on the attached Exhibit including all valve covers, manholes, boxes, inlets, and such surface utility facilities information useful for maintenance purposes. In addition, inverts of storm drain inlets and manholes and sewer manholes will be measured and pipe directions and all sizes shall be noted. Utility surveys as described in this proposal will be performed utilizing RTK GPS or Total Station Equipment (whichever is determined to be more efficient based on field conditions).

LCC will add the field underground and surface utility information to the Aerial Base Map CAD mapping. Linework and text added to the CAD files will added using layers indicating the type of facility being shown (e.g. gas, electric, sewer, etc.).

Task 2 – Perform Supplemental Ground Surveys

A detailed supplemental topographic ground level survey will be conducted within the limits shown on the attached detailed mapping limits (shown outlined with solid and dashed light blue line). LCC will coordinate with SLUSD's project manager(s) to verify the final requirements for the supplement survey work. We will perform a ground based topographic survey (1"=20' scale) or other suitable scale, with 1-foot contours of the existing site area, as follows:

The survey will include locating major topographic features horizontally and vertically such as curbs, sidewalks, flatwork, building walls/corners, poles, signs, lights, trees, planter areas, striping, parking lot grades, fences, visible utility boxes, and grates of inlets, and visible surface utility facilities within the survey limits. All collected survey information will be shown with elevations and line work suitable for future design improvement work.

After field surveys and research and compilation is completed, LCC will add the supplemental survey data and surface utility information to the aerial base map mapping. Linework and text added to the CAD files will be added using layers indicating the type of facility being shown (e.g. gas, electric, sewer, concrete, spots, walls, etc.).

DELIVERABLES

We will provide the District with a PDF plot of the signed survey, and up to two (2) sets of bond copies of drawings, along with the electronic CAD files of the base map delivered via email or ftp site. The CAD drawing will be drawn at 1:1 and provided in AutoCAD 3D.

HOURS AND COSTS BY TASKS

A spreadsheet which shows the estimated hours and cost for each of the various subtasks to be performed is attached. The spreadsheet is submitted for information and budget purposes only and the amounts per subtasks are not guaranteed, i.e. the actual amount per subtask may be higher or lower based upon the actual work performed.

HOURLY RATES

Work will be performed at the hourly rates attached to our Independent Consultant Agreement for Professional Services with SLUSD dated June 10, 2020. LCC, Inc. proposes to provide the scope of services described herein on a time and materials basis for a total amount not to exceed the total amount indicated at the bottom of the attached spreadsheet without written authorization, in accordance with said agreement.

SCHEDULE

We can begin work within one week of receiving a written notice to proceed. We can work with the District to complete all tasks in accordance with the District's schedule as is reasonably possible. We estimate that the field surveys and office mapping will take approximately three to four weeks to complete. Our schedule will be dependent upon rain delays, and the assumption we will be given reasonable access to the property. LCC will not be responsible for delays in schedule which are not reasonably within their control.

ADDITIONAL SERVICES AND ASSUMPTIONS

Additional services are items that can be provided by LCC, or its subcontractors, but which are not included in the "Scope of Services" outlined above. Additional services will be provided on a "Time and Materials" basis, according to LCC's prevailing "Rate Schedule", unless a separate agreement for the work is negotiated.

Work items that will be considered "Additional Services" include, but are not limited to the following:

- Boundary Surveys or Mapping
- Surveying of any kind outside of the work limit line shown on the "Survey Exhibit"

- Reviewing and incorporating comments and mark-ups from the Client after final submittal has been made.
- Underground locating or “Potholing” to locate existing utilities.
- Existing or New Easement related work.
- Civil Engineering Services
- Construction Staking

LCC will undertake additional services when requested to do so by the Client. Prior to proceeding with any Additional Services, LCC will send a work order to the Client indicating the nature of requested additional services, and an estimate of the fees to be charged for the additional work, subject to approval by the Client.

Thank you for this opportunity to submit this proposal. Please feel free to contact me at 925-228-4218 or cmp@lcc-inc.com if you have any questions, or if you would like us to proceed.

Sincerely,
LCC Engineering & Surveying, Inc.



Christine M. Parks
Principal

Encl: Limits of Survey Work Exhibit (1 pages)
Estimated Hours and Cost by Task, Spreadsheet (1 page)


AERIAL MAPPING LIMITS
PROVIDE OPTIONAL ADDED COST TO INCLUDE THIS AREA IN AERIAL MAPPING
AERIAL MAPPING TO C/L BANCROFT AVE
ABOVE GROUND UTILITY STRUCTURES WITHIN AERAIL MAPPING LIMITS (SURVEY OF MARKINGS BY NEJAT)
DETAILED TOPO LIMITS
ADD THIS AREA FOR THE P.O.T. PATH OF TRAVEL EXISTING CONDITION. WLC
Bancroft Ave
Cleveland St
Fulton Ave
Evergreen Ave
368 ft
Google Earth

ESTIMATED WORKER HOURS AND COST BY TASK
LCC, INC.

SAN LEANDRO UNIFIED SCHOOL DISTRICT (SLUSD)
SAN LEANDRO HIGH SCHOOL (SLHS)
PROPOSAL FOR LAND SURVEYING & MAPPING SERVICES
October 14, 2020

		LCC, INC. HOURS									HOURS			AMOUNTS		
	SCOPE OF WORK	**PS**	**S2**	**S1**	**LS**	**CE**	**AE**	**C2**	**C1**	**TT**	**LCC**	**SUB**	**TOTAL**	**LCC**	**SUB**	**TOTAL**
Task 1 - Perform Aerial Surveys and Mapping (Including Utility Structures)																
1	Coordinate Surveys w/ Client	1			2						3		3	$597	$0	$597
2	Set flight panels and control pts & tie in w/ GPS (6 EA Ctrl Points)		4								4		4	$1,020	$0	$1,020
3	Aerial Mapping & Planimetrics - 20 SCALE (solid red line)				2						2	29.5	31.5	$380	$5,900	$6,280
3a	*(OPTIONAL) Sports Fields Additional Mapping (dashed red line)*										*0*	*1.75*	*1.75*	*$0*	*$350*	*$350*
3b	*(OPTIONAL) Color Orthophoto*										*0*	*1.75*	*1.75*	*$0*	*$350*	*$350*
4	Survey Utility Structures and MH / Inlet Depths		16								16		16	$4,080	$0	$4,080
5	Office - Incorporate utilities into Aerial Mapping				2			12			14		14	$1,952	$0	$1,952
6	Management - review survey data and mapping	1			4						5		5	$977	$0	$977
	Subtotal Task 1	2	20	0	10	0	0	12	0	0	44	33	77	$9,006	$6,600	$15,606
															Consultant Mark-up @ 10%	$660
															Reimbursable Expenses (Estimated):	$0
															Total Task 1	**$16,266**
Tasks 2 - Supplemental (Ground) Surveys and Mapping																
1	Field - Supplemental Surveys (outlined in light blue)		16								16		16	$4,080	$0	$4,080
2	Office - topographic mapping				4			24			28		28	$3,904	$0	$3,904
3	Management - review survey data and mapping	1			2						3		3	$597	$0	$597
	Subtotal Task 2	1	16	0	6	0	0	24	0	0	47	0	47	$8,581	$0	$8,581
															Consultant Mark-up @ 10%	$0
															Reimbursable Expenses (Estimated):	$0
															Total Task 2	**$8,581**
	TOTAL - ALL TASKS	3	36	0	16	0	0	36	0	0	91	33	124	$ 17,587	$ 6,600	
															Total Tasks 1-2	$24,847
															Rounded Total	**$24,850**

PS = PRINCIPAL SURVEYOR	$217	AE = ASSISTANT ENGINEER	$145	SUB = SUBCONSULTANT	$200
S2 = TWO-MAN SURVEY CREW	$255	C2 = CAD DESIGNER	$131	(HOURLY RATES FOR SUBCONSULTANTS ARE	
S1 = ADDITIONAL SURVEY CREW MEMBER	$86	C1 = CAD OPERATOR	$96	USED AS CALCULATION TOOL FOR	
LS = LAND SURVEYOR / SENIOR ENGINEER	$190	TT = TECHNICAL TYPIST	$76	ESTIMATED COST OF MATERIALS	
CE = CIVIL ENGR.	$163			DELIVERED)	